

Bureau of Land Management Buffalo Field Office

Approved Resource Management Plan

ATTACHMENT 6

From the USDI 2015 Record of Decision and Approved Resource Management Plan Amendments for the Rocky Mountain Region including the Greater Sage-Grouse Sub-Regions of: Lewistown, North Dakota, Northwest Colorado and Wyoming and the Approved Resource Management Plans for Billings, Buffalo, Cody, HiLine, Miles City, Pompeys Pillar National Monument, South Dakota and Worland



September 2015

MISSION STATEMENT

To sustain the health, diversity, and productivity of the public lands
for the use and enjoyment of present and future generations.

BLM/WY/PL-15/022+1610

Buffalo Field Office Approved Resource Management Plan

**September 2015
BLM/WY/PL-15/022+1610**

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State Director Recommendation for Approval

I hereby recommend for approval the Buffalo Resource Management Plan's management goals, objectives, and decisions.



Mary Jo Rugwell, Acting Wyoming State Director



Date

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Acronyms and Abbreviations

\$:
U.S. dollars

#:
number

%:
percent

$\leq$:
less than or equal to

$\geq$:
greater than or equal to

AAQS:
Ambient Air Quality Standard

ACEC:
Area of Critical Environmental Concern

ADA:
Americans with Disabilities Act

AFMSS:
Automated Fluid Minerals Support System

AIM:
Assessment, Inventory, and Monitoring

AMP:
Allotment Management Plan

AMS:
Analysis of the Management Situation

AMWG:
Adaptive Management Working Group

APD:
Application for Permit to Drill

APHIS:
Animal and Plant Health Inspection Service

APLIC:
Avian Power Line Interaction Committee

AQ:
Air Quality

AQD:
Air Quality Division

AQRV:
Air Quality Related Value

AUM:
Animal Unit Month

BACT:
Best Available Control Technology

BAER:
Burned Area Emergency Rehabilitation

BAR:
Burned Area Rehabilitation

BCB:
Back Country Byways

BER:
Baseline Environmental Report

BFO:
Buffalo Field Office

BLM:
Bureau of Land Management

BMP:
Best Management Practice

BR:
Biological Resources

C:
Custodial Allotment

CAA:
Clean Air Act

CASTNET:
Clean Air Status and Trends Network

CBNG:
Coalbed Natural Gas

CCA:
Candidate Conservation Agreements

CCAA:
Candidate Conservation Agreements with Assurances

CCCD:
Campbell County Conservation District

CDL:
Cropland Data Layer

CEQ:
Council on Environmental Quality

CFR:
Code of Federal Regulations

CH₃:
Methyl

CH₄:
Methane

cm:
centimeter

CO:
Carbon monoxide

CO₂:
Carbon Dioxide

COA:
Condition of Approval

COT:
Conservation Objectives Team

CRM:
Coordinated Resource Management

CRMP:
Cultural Resources Management Plan

CRPP:
Cultural Resource Project Plan

CSU:
Controlled Surface Use

CWA:
Clean Water Act

CWPP:
Community Wildfire Protection Plan

dB_A:
A-weighted decibels

DDCT:
Density and Disturbance Calculation Tool

DEQ:
Department of Environmental Quality

DFC:
Desired Future Condition

DOI:
Department of the Interior

DPC:
Desired Plant Community

DR:
Decision Record

E:
East

EA:
Environmental Assessment

EC:
Electrical Conductivity

EEA:
Environmental Education Area

EGU:
Electric Generating Unit

EIS:
Environmental Impact Statement

EO:
Executive Order

EPA:
Environmental Protection Agency

ERMA:
Extensive Recreation Management Area

ES&R:
Emergency Stabilization and Rehabilitation

ESA:
Endangered Species Act

ESD:
Ecological Site Description

ET:
Evapotranspiration

EVT:
Existing Vegetation Type

FAA:
Federal Aviation Administration

FAMS:
Facility Asset Management System

FCC:
Federal Communications Commission

FLPMA:
Federal Land Policy and Management Act

FM:
Fire and Fuels Management

FMP:
Fire Management Plan

FO:
Field Office

FR:
Federal Register

ft:
feet

GHG:
Greenhouse Gas

GHMA:
General Habitat Management Area

GIS:
Geographic Information System

GRSG:
Greater Sage-Grouse

GS:
Grassland and Shrubland Resources

H₂S:
Hydrogen Sulfide

HAF:

Habitat Assessment Framework

HFRA:

Healthy Forests Restoration Act

HMP:

Habitat Management Plan

HR:

Heritage and Visual Resources

I:

Improvement Allotment

IM:

Instruction Memorandum

IMPROVE:

Interagency Monitoring of Protected Visual Environments

km:

Kilometers

kV:

Kilovolt

Kw:

Soil Erodibility Factor

L&R:

Lands and Realty

LAC:

Limit of Acceptable Change

LBA:

Lease by Application

LQD:

Land Quality Division

LR:

Land Resources

LUP:

Land Use Plan

LWC:

Lands with Wilderness Characteristics

M:

Maintain Allotment

m:

meter

MBTA:

Migratory Bird Treaty Act

mg/L:

milligrams per liter

MLA:

Mineral Leasing Act

MOU:

Memorandum of Understanding

MR:

Mineral Resources

MRLC:

Multi-Resolution Land Characteristics Consortium

MTBS:

Monitoring Trends in Burn Severity

MZ:

Management Zone

N:

North

N/A:

Not Applicable

NAAQS:

National Ambient Air Quality Standards

NAGPRA:

Native American Graves Protection and Repatriation Act

NASS:

National Agricultural Statistics Service

NEPA:

National Environmental Policy Act

NH₃:

Ammonia

NHPA:

National Historic Preservation Act

NIFC:

National Interagency Fire Center

NLCD:

National Land Cover Dataset

NOC:

National Operations Center

NO_x:

Nitrogen oxide

NPDES:

National Pollutant Discharge Elimination System

NRC:

Nuclear Regulatory Commission

NRCS:

Natural Resources Conservation Service

NREL:

National Renewable Energy Laboratory

NRHP:

National Register of Historic Places

NSCR:

Non-Selective Catalytic Reduction

NSO:

No Surface Occupancy

NTT:

National Technical Team

NWSGLWG:

Northeast Wyoming Sage-Grouse Local Working Group

O&G:

Oil and Gas

OHV:

off-highway vehicle

OL:

Other Leasables

PAC:

Priority Area for Conservation

PFC:

Proper Functioning Condition

PFYC:

Potential Fossil Yield Classification

PHMA:
Priority Habitat Management Area

PM:
Particulate Matter

PM₁₀:
Particulate Matter 10 microns or less

PM_{2.5}:
Particulate Matter 2.5 microns or less

POD:
Plan of Development

POO:
Plan of Operations

ppb:
Parts per billion

ppm:
Parts per million

PR:
Physical Resources

PRB:
Powder River Basin

PSD:
Prevention of Significant Deterioration

R&PP:
Recreation and Public Purposes

R&VS:
Recreation and Visitor Services

RAMP:
Recreation Area Management Plan

RDF:
Required Design Feature

RE:
Renewable Energy

READ:
Resource Advisors

RFA:
Reasonable Foreseeable Action

RFD:
Reasonable Foreseeable Development

RMA:
Recreation Management Area

RMP:
Resource Management Plan

RMZ:
Recreation Management Zone

RO:
Regional Office

ROD:
Record of Decision

ROW:
right-of-way

RSC:
Recreation Setting Characteristic

S:
South

SCR:
Selective Catalytic Reduction

SD:
Special Designations

Sec:
Sec

SGL:
Sage-Grouse Initiative

SHPO:
State Historic Preservation Office

SIP:
State Implementation Plan

SMA:
Special Management Area

SO:
State Office

SR:
Socioeconomic Resources

SRMA:
Special Recreation Management Area

SRP:
Special Recreation Permit

SS:
Special Status

SSURGO:
Soil Survey Geographic Database

SUA:
Special Use Authorization

SWAP:
State Wildlife Action Plan

T:
Township

TBD:
To Be Determined

TBNG:
Thunder Basin National Grassland

TCP:
Traditional Cultural Property

TL:
Timing Limitation

TLS:
Timing Limitation Stipulation

TMA:
Travel Management Area

TMDL:
Total Maximum Daily Load

TTM:
Travel and Transportation Management

U.S.:
United States

U.S.C.:
United States Code

USDA:
United States Department of Agriculture

USFS:

United States Forest Service

USFWS:

United States Fish and Wildlife Service

USGS:

United States Geological Survey

VOC:

Volatile Organic Compound

VRI:

Visual Resource Inventory

VRM:

Visual Resource Management

W:

West

WAAQS:

Wyoming Ambient Air Quality Standards

WAFWA:

Western Association of Fish and Wildlife Agencies

WARMS:

Wyoming Air Resource Monitoring System

WGFD:

Wyoming Game and Fish Department

WHMA:

Wildlife Habitat Management Area

WHPD:

Wyoming High Plains District

WL:

Wildlife

WNv:

West Nile Virus

WO:

Washington Office

WOGCC:

Wyoming Oil and Gas Conservation Commission

WQD:

Water Quality Division

WSA:

Wilderness Study Area

WSEO:

Wyoming State Engineer's Office

WSGWG:

Wyoming Greater Sage-Grouse Working Group

WSR:

Wild and Scenic River

WUI:

Wildland Urban Interface

WY:

Wyoming

WYNDD:

Wyoming Natural Diversity Database

WYPDES:

Wyoming Pollutant Discharge Elimination System

µg/m³:

micrograms per cubic meter

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Chapter 1. Introduction

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Introduction

The Record of Decision (ROD) and Approved Resource Management Plan (RMP) for the Buffalo Field Office is intended to provide land use planning and management direction at a broad scale and to guide future actions for the life of the plan. The regulations for making and modifying land use plan decisions, which comprise an RMP, are found in 43 Code of Federal Regulations (CFR) Part 1600. Land use plan decisions consist of (1) desired outcomes (goals and objectives) and (2) allowable uses and management actions.

The ROD and Approved RMP were prepared by the Bureau of Land Management (BLM) Buffalo Field Office and provide overall management direction for resources on BLM-administered land in the Buffalo Field Office, Wyoming. The Approved RMP is the result of a multi-year planning effort to revise the 1985 Buffalo RMP, as updated by the 2001 Buffalo RMP Update and amended by the 2003 ROD for the Powder River Basin Oil and Gas Project and Decision Record for the 2011 Fortification Creek RMP Amendment/Environmental Assessment (EA) by the BLM Washington Office (WO), Wyoming State Office, High Plains District, Buffalo Field Office, cooperating agencies, special interest and user groups, and concerned citizens. The ROD and Approved RMP contain decisions from the Buffalo Proposed RMP and Final Environmental Impact Statement (EIS) (BLM 2015b) that will enable the BLM to manage the lands within the Buffalo Field Office's administrative boundaries to achieve the desired future conditions and management objectives in partnership with communities and citizens. The planning area comprises approximately 7.4 million acres of land in north-central Wyoming in Campbell, Johnson, and Sheridan counties.

The ROD documents the approval of the RMP, describes the modifications and clarifications made to the Proposed RMP after release of the Final EIS, presents an overview of the alternatives considered in the Proposed RMP and Final EIS, provides rationale for the decisions, identifies mitigation and the monitoring requirements, and describes the public involvement process, including consultation and coordination conducted during the planning process. The Approved RMP presents the purpose and need for revision of the 1985 Buffalo RMP, as amended, planning issues considered and addressed, management decisions, and how the Approved RMP will be implemented and evaluated. The Approved RMP is supported by appendices, a glossary, maps (Appendix A (p. 219)), and references. Some of the appendix and map numbers/letters have changed between the Proposed RMP and Final EIS and the Approved RMP. Appendix H (p. 413) includes crosswalk tables identifying the changes in numbering/lettering of the appendices and maps between the two documents.

1.1. Description of the Planning Area

Located in north-central Wyoming (Figure 1.1, "Buffalo Field Office Resource Management Plan Planning Area" (p. 3)), the Buffalo planning area covers approximately 7.4 million acres of federal, state, and private land in Campbell, Johnson, and Sheridan counties. Of the total area, approximately 780,000 acres are BLM-administered federal surface lands and 4.8 million acres are BLM-administered federal mineral estate. Maps 1-1, 1-2, and 1-3 show surface management and sub-surface estate as well as Greater Sage-Grouse Habitat Management Areas in the planning and decision areas. Maps 1-4 and 1-5 show BLM-administered surface and federal mineral estate in the planning area not specifically related to Greater Sage-Grouse.

Lands where the ownership of the surface estate and mineral estate differ are referred to as split estate. In these situations, mineral rights are considered the dominant estate, meaning they take precedence over other rights associated with the property, including those associated with owning the surface. The areas with scattered surface land ownership patterns and varied mineral ownerships, along with split estate lands, affect BLM management options (Appendix G (p. 403)).

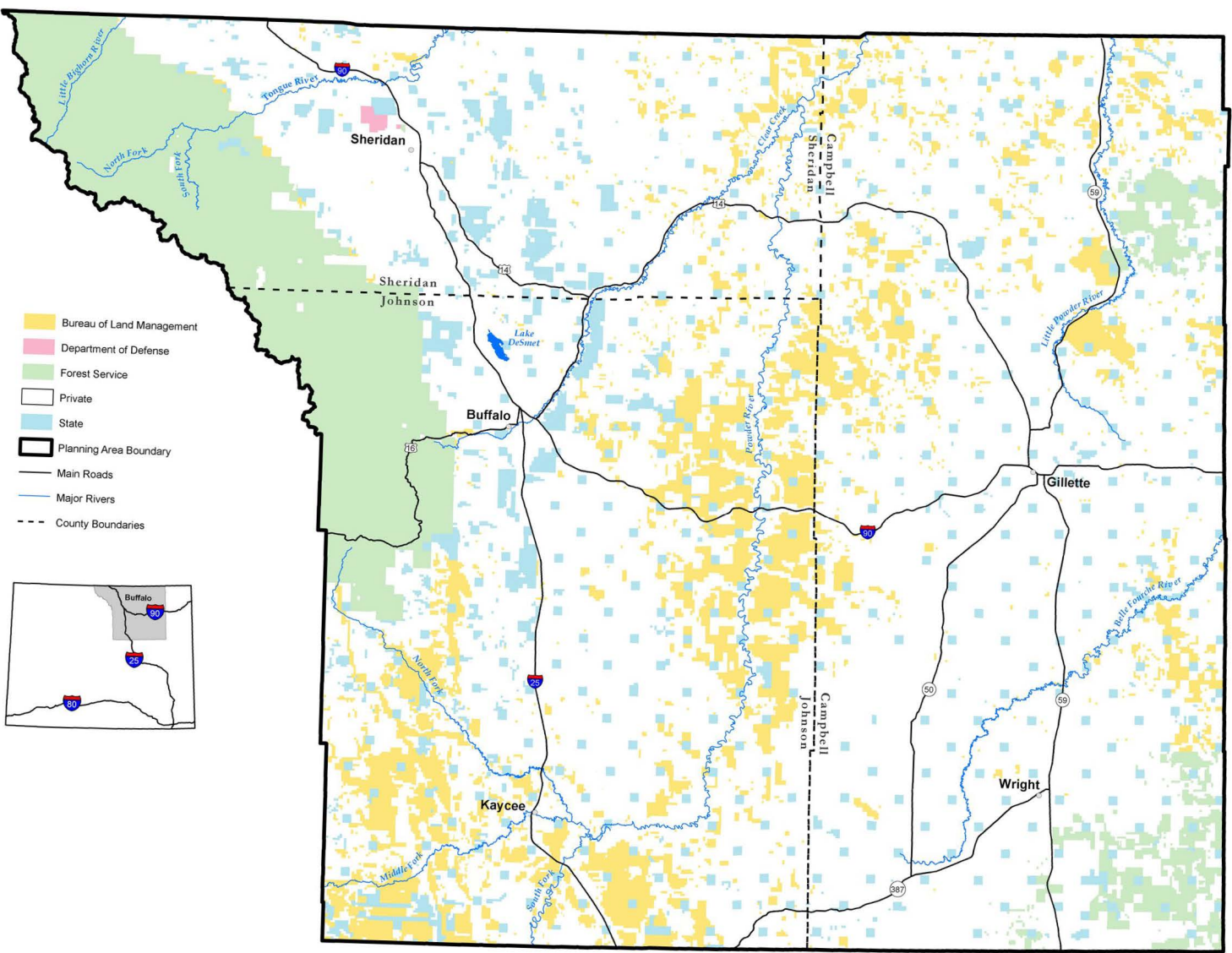


Figure 1.1. Buffalo Field Office Resource Management Plan Planning Area

1.2. Purpose and Need for the Resource Management Plan Revision

1.2.1. Purpose

An RMP is a land use plan that provides direction for managing public lands administered by the BLM in accordance with its multiple use mandate. The Federal Land Policy and Management Act (FLPMA) directs the BLM to develop such land use plans to provide for appropriate uses of public land. Decisions in land use plans guide future land management actions and subsequent site-specific implementation decisions. The RMP establishes goals and objectives (desired outcomes) for resource management and the measures needed to achieve them. These measures are expressed as management actions and allowable uses (i.e., lands that are open or available for certain uses [including any applicable restrictions] and lands that are closed to certain uses). The purpose of revising the existing plan is to address conditions within the planning area that have changed and to evaluate new information in order to develop a management strategy that achieves a combination of the following:

- Employ a community-based planning approach to seek broadly supported solutions to issues, and collaborate with federal, state, and local cooperating agencies.
- Establish goals and objectives (desired outcomes) for management of resources and resource uses within the approximately 780,000 surface acres and 4.8 million acres of federal mineral estate in the planning area administered by the BLM in accordance with the principles of multiple use and sustained yield.
- Identify land use plan decisions to guide future land-management actions and subsequent site-specific implementation decisions.
- Identify management actions and allowable uses anticipated to achieve the established goals and objectives and reach desired outcomes.
- Provide comprehensive management direction by making land use decisions for all appropriate resources and resource uses administered by the BLM in the planning area or by updating existing decisions.
- Provide for compliance with applicable tribal, federal, and state laws, standards, implementation plans, and BLM policies and regulations.
- Recognize the Nation's needs for domestic sources of minerals, food, timber, and fiber, and incorporate requirements of the Energy Policy Act of 2005 (Pub. L. 2005).
- Retain flexibility to adapt to new and emerging issues and opportunities and to provide for adjustments to decisions over time based on new information and monitoring.
- Strive to be compatible with existing plans and policies of adjacent local, state, tribal, and federal agencies while complying with federal law, regulations, and BLM policy.

1.2.2. Need for Revising the Existing Plan

New data have become available, and laws, regulations, and policies regarding management of these public lands have changed. For example, the revised RMP will incorporate appropriate management actions and practices to conserve Greater Sage-Grouse and its habitat on BLM-administered lands. In addition, the existing plan's decisions do not satisfactorily address all of the new and emerging issues in the planning area. These changes have resulted in the need to revise the existing plan. The BLM identified the need, or requirement, to revise the existing plan through a formal evaluation of the existing plan, consideration of the Analysis

of the Management Situation (AMS) (BLM 2009c), examination of issues identified during the public involvement process known as scoping, and through collaboration with cooperating local, state, and federal agencies.

New Data

Monitoring, availability of new information, and advances in science and technology provide new data to consider in the revision of the existing plan. Select new data can be found in the following documents and sources:

- BLM Assessing the Potential for Renewable Energy on Public Lands (BLM 2003a)
- Buffalo RMP Revision Analysis of the Management Situation (BLM 2009c)
- Buffalo Mineral Occurrence and Development Potential Report (BLM 2009a)
- BLM Wyoming Statewide Programmatic Endangered Species Act (ESA) Consultations:
 - Bald eagle – 2004 (BLM 2004a)
 - Black-footed ferret – 2006 (BLM 2006)
 - Black-tailed prairie dog – 2008 (BLM 2008a)
 - Mountain plover – 2007 (BLM 2007d)
 - Ute ladies'-tresses orchid – 2007 (BLM 2007e)
- Cultural Class I Regional Overview (BLM 2010)
- Energy Policy and Conservation Act of 2000 Scientific Inventory of Onshore Federal Lands Oil and Gas Resources and Reserves and the Extent and Nature of Restrictions or Impediments to their Development (DOI et al. 2003)
- Preliminary Reasonable Foreseeable Development (RFD) Scenario for Oil and Gas (Stilwell et al. 2012)
- Final Programmatic EIS on Wind Energy Development on BLM-administered Lands in the Western United States (BLM 2005)
- Executive Order (EO) 2011-5, 2013-3, 2015-4
- WO Instruction Memorandum (IM) 2012-044
- Wyoming State Office IM 2012-019
- Conservation Buffer Distance Estimates for Greater Sage-Grouse - A Review (USGS 2014)
- Wyoming Greater Sage-Grouse Conservation Plan (WSG WG 2003)
- Conservation Assessment of Greater Sage-Grouse and Sagebrush Habitats (Connelly et al. 2004)
- Western Association of Fish and Wildlife Agencies (WAFWA) Greater Sage-Grouse Comprehensive Conservation Strategy (Stiver et al. 2006)
- Northeast Wyoming Sage-Grouse Conservation Plan (NWSGLWG 2006)
- Greater Sage-grouse (*Centrocercus urophasianus*) Conservation Objectives: Final Report (USFWS 2013)
- Final EIS for Vegetation Treatments on BLM Lands in Seventeen Western States (BLM 2007c)
- Final Programmatic EIS for Geothermal Leasing in the Western United States (BLM 2008c)
- Powder River Basin Oil and Gas Project Final EIS and Plan Amendment (BLM 2003b)
- Fortification Creek RMP Amendment/EA (BLM 2011a)
- Energy Policy Act of 2005
- BLM Manual 6320 – Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process (BLM 2012)
- Department of the Interior (DOI) Order 3294 – Energy Management Reform (DOI 2010)

New and Revised Policies

Numerous policies have been either revised or developed since the ROD for the existing plan was signed. Appendix E (p. 389) lists relevant policies, including new and revised policies, and their effective dates.

The BLM released Handbook H-8320-1, Planning for Recreation and Visitor Services on August 22, 2014. The handbook assists BLM staff in the planning and management of recreation and visitor services on public land. The release of the handbook coincided with the final development of the Proposed RMP and Final EIS. Accordingly, not all recreation and visitor services decisions in this Proposed RMP and Final EIS follow the recommended format provided in the handbook. However, the Proposed RMP and Final EIS complies with the requirements for establishing desired conditions, allowable uses and actions related to the management of recreation and visitor services as discussed in Handbook H-8320-1.

Emerging Issues and Changing Circumstances

Emerging issues and changes in local, regional, and national circumstances to consider when revising the existing plan include the following:

- Increasing and conflicting demands on the planning area's resources
- Increasing complexity of resource management issues
- Changes in resource and resource condition monitoring tasks and the entities conducting monitoring
- Changes in the legal status of plants and wildlife occurring or potentially occurring in the planning area
- Increasing conflicts between resource uses and protection of specific wildlife and wildlife habitat
- Greater Sage-Grouse population viability
- Maintaining public access to public lands
- The spread of invasive plant and animal species on public lands
- Changing demand for energy and minerals development
- Increased interest in renewable energy development across the Nation
- The management of riparian areas and water quality concerns
- Fire and fuels management practices and changes in national fire policy
- Changes in livestock grazing practices and rangeland conditions
- Changes in recreation and visitor use levels and locations
- The management and protection of recently discovered cultural and paleontological resources
- Addressing travel management, including increases in off-highway vehicle (OHV) use
- The appropriateness of certain withdrawals, land tenure adjustments, land use authorizations, and Rights-of-Way (ROWs) to include utility corridor ROWs
- Cumulative increase in surface disturbance due to mining and oil and gas activities
- Achieving reclamation success after mineral development activities
- Identification of unique or sensitive areas that meet the criteria for special designation
- Increasing air quality issues affecting human health and regulatory compliance
- Changes to visual resources classifications

Greater Sage-Grouse Management

In March 2010, the U.S. Fish and Wildlife Service (USFWS) published its decision that listing of the Greater Sage-Grouse as a threatened or endangered species under the ESA was "Warranted but Precluded." Inadequacy of regulatory mechanisms was identified as a major threat in the USFWS finding on the petition to list the Greater Sage-Grouse. The USFWS has identified the

principal regulatory mechanism for the BLM as conservation measures in RMPs. Based on the identified threats to the Greater Sage-Grouse and the USFWS timeline for making a listing decision on this species, the BLM needs to incorporate objectives and adequate conservation measures into RMPs in order for the USFWS to constitute these RMP measures as adequate regulatory mechanisms that conserve the Greater Sage-Grouse, thus contributing to the avoidance of potentially listing the Greater Sage-Grouse.

On November 21, 2014, the U.S. Geological Survey (USGS) published “Conservation Buffer Distance Estimates for Greater Sage-Grouse – A Review” (Open File Report 2014-1239). The USGS review provided a compilation and summary of published scientific studies that evaluated the influence of anthropogenic activities and infrastructure on Greater Sage-Grouse populations. The BLM has reviewed this information and examined how lek buffer-distances were addressed through land use allocations and other management actions in the Buffalo RMP/EIS. The State of Wyoming’s Core Population Area Strategy is designed to protect birds and habitat within core population areas by using a suite of tools and mechanisms that work in concert to conserve Greater Sage-Grouse by reducing habitat loss and fragmentation through lek buffers, disturbance limits, excluded activities, and a sophisticated mapping utility to monitor the amount and density of disturbance. The USFWS has informed the BLM that the combined effect of these overlapping and reinforcing mechanisms gives the USFWS confidence that the lek buffer distances in the Core Population Area Strategy will be protective of breeding Greater Sage-Grouse.

This RMP revision incorporates specific management actions and conservation measures to protect, restore, and enhance Greater Sage-Grouse and its habitat on public land.

1.3. Planning Criteria

The planning criteria used in the ROD and Approved RMP are identified in the Buffalo Proposed RMP and Final EIS. Some of these criteria are:

- The Proposed RMP will be in compliance with the FLPMA and all other applicable laws, regulations, and policies.
- Impacts from the management alternatives considered in the revised RMP will be analyzed in an EIS developed in accordance with regulations at 43 CFR 1610 and 40 CFR 1500.
- Lands covered in the RMP will be public land including split estate managed by the BLM. No decisions will be made relative to non-BLM-administered lands.
- The planning process will follow 10 stages of an EIS-level planning process: scoping, development of an AMS report, formulation of alternatives, analysis of the alternatives’ effects, selection of a preferred alternative, publication of a Draft RMP and EIS, a 90-day public comment period for the Draft RMP and EIS, preparation and publication of a Proposed RMP and Final EIS, a 30-day public protest period, and preparation of a ROD. For specific information, please see the Land Use Planning Handbook, H-1601-1.
- For program-specific guidance of land use planning level decisions, the process will follow the Land Use Planning Manual 1601 and Handbook H-1601-1, Appendix C.
- Broad-based public participation will be an integral part of the planning and EIS process.
- Decisions in the plan will strive to be compatible with the existing plans and policies of adjacent local, state, federal, and tribal agencies to the extent those plans and policies are also consistent with the purposes, policies, and programs of federal law, and regulations applicable to public lands.
- The RMP will recognize the state’s responsibility and authority to manage wildlife. The BLM will consult with the Wyoming Game and Fish Department (WGFD).

- The National Greater Sage-Grouse Habitat Conservation Strategy (BLM 2004b) requires that impacts to sagebrush habitat and sagebrush-dependent wildlife species (including Greater Sage-Grouse) be analyzed and considered in BLM land use planning efforts for the public lands with Greater Sage-Grouse sagebrush habitat.
- The BLM will utilize the WAFWA Conservation Assessment of Greater Sage-Grouse and Sagebrush Habitats (Connelly et al. 2004), and any other appropriate resources, to identify Greater Sage-Grouse habitat requirements and best management practices.
- The RMP will comply with WO IM 2012-044 and address public comments received during national scoping related to WO IM 2012-044 implementation.
- The RMP will recognize valid and existing rights. The RMP will consider the likelihood of development of not-yet-constructed surface-disturbing activities – as defined in Table D.4, “Relationship Between the Eighteen Threats and the Three Habitat Disturbance Measures for Monitoring” (p. 352) of the *Monitoring Framework* (in Appendix D (p. 325)) – under valid existing rights.
- The RMP and EIS will incorporate management decisions brought forward from existing planning documents including, but not limited to the 2003 Powder River Basin Oil and Gas Project Final EIS and RMP Amendment (BLM 2003b) and the 2011 Fortification Creek Planning Area Final RMP Amendment (BLM 2011a).
- The planning team will work cooperatively and collaboratively with cooperating agencies and all other interested groups, agencies, and individuals.
- The BLM and cooperating agencies will jointly develop alternatives for resolution of resource management issues and management concerns.
- The planning process will incorporate the Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for Public Lands Administered by the BLM in the State of Wyoming (Appendix I (p. 419)) as goal statements.
- The BLM will identify lands with wilderness characteristics and analyze a range of management alternatives for this resource, pursuant to BLM Manuals 6310, Conducting Wilderness Characteristics on BLM Lands and 6320, Considering Lands with Wilderness Characteristics in Land Use Plans.
- Areas with special environmental qualities will be designated as Areas of Critical Environmental Concern (ACECs) or other appropriate designations if necessary for their protection.
- Suitable segments of Wild and Scenic Rivers will be managed pursuant to BLM Manual 6400 to protect or enhance the free-flowing condition, water quality, tentative classification, and any outstandingly remarkable values of suitable river segments until Congress designates the river or releases it for other uses. This RMP revision effort will analyze future management options should Congress release the suitable segment to other uses.
- Wilderness Study Areas (WSAs) will be managed pursuant to BLM Manual 6330, Management of Wilderness Study Areas, which replaces the Interim Management Policy for Lands Under Wilderness Review, until Congress either designates all or portions of the WSA as wilderness or releases the lands to other uses. This RMP revision effort will analyze future management options should Congress release any WSAs to other uses.
- Forest management strategies will be consistent with the Healthy Forests Restoration Act.
- The Wyoming High Plains District (WHPD) Fire Management Plan (FMP) will be updated to reflect objectives from this RMP, and will be implemented to address fire management on a landscape level.
- Geographic Information System (GIS) and metadata information will meet Federal Geographic Data Committee standards, as required by EO 12906. All other applicable BLM data standards will also be followed.

- The planning process will involve American Indian Tribal governments and will provide strategies for the protection of recognized traditional uses.
- All proposed management actions will be based upon current scientific information, research, and technology, as well as existing inventory and monitoring information.
- The RMP will include adaptive management criteria and protocols to deal with future issues.
- The planning process will use the Wyoming BLM Mitigation Guidelines to develop management options and alternatives and analyze their impacts, and as well as part of the planning criteria for developing the options and alternatives and for determining mitigation requirements.
- An RFD scenario for fluid minerals will be developed.
- Planning and management direction will be focused on the relative values of resources and not the combination of uses that will give the greatest economic return or economic output.
- Coal screening was completed in 2001 for areas within the Buffalo planning area with coal development potential located in Campbell and Sheridan counties, Wyoming. These coal screening decisions updated the Buffalo RMP and the Thunder Basin National Grasslands Land and RMP. Based on the results of the BLM's call for coal resource information, no additional coal planning decisions will be made for the Buffalo RMP, and the 2001 decisions identifying areas acceptable for further consideration for coal leasing will be moved forward into the revised RMP.
- The RMP and EIS will address *Pennaco v. U.S.*, 377 F.3d 1147 (10th Cir. 2004) requiring analysis of coalbed natural gas development for fluid mineral leasing decisions in the Powder River Basin.

1.4. Modifications and Clarifications

During preparation of the Approved RMP, minor changes were made to the Proposed RMP. These minor modifications and clarifications were made as a result of internal reviews, response to protests, and addressing recommendations provided to the BLM during the Governor's Consistency Review.

Adaptive Management

- Appendix D (p. 325) in the Approved RMP was revised to include a commitment that the hard and soft trigger data will be analyzed as soon as it becomes available after the signing of the ROD and then at a minimum, analyzed annually thereafter, as recommended by the Governor during the Governor's Consistency Review.

Fire and Fuels Management

- Text was added to Goal FM:1 to stress that the protection of human life is the single, overriding priority for fire and fuels management activities.

Fluid Minerals

- The minimum lease size requirement was removed from SS WL-4023 for consistency amongst Wyoming RMPs and because it would be extremely difficult to implement within the Buffalo planning area given the complex mineral ownership pattern.
- An exception was added to O&G-2006 to allow for geophysical exploration within Priority Habitat Management Area (PHMA) when designed to minimize habitat fragmentation and in conformance with timing and distance decisions, except where prohibited or restricted by existing land use plan decisions as recommended by the Governor during the Governor's Consistency Review.

- The noise stipulation for SS WL-4024 was removed for consistency with the other Wyoming RMPs and it was determined to be adequately covered by other lease stipulations such as the 0.6 mile lek No Surface Occupancy (NSO) stipulation.

Greater Sage-Grouse Seasonal Habitat Desired Conditions

See Table 2.4 in the Proposed RMP and Table 2.6, “Seasonal Habitat Desired Conditions for Greater Sage-Grouse” (p. 26) in the Approved RMP.

- The introduction to the table was revised to clarify that all BLM use authorizations will contain terms and conditions to meet or make progress toward meeting the habitat objectives.
- Footnote 1 was revised to allow for date shifts where supported by credible data, as recommended by the Governor during the Governor’s Consistency Review.
- Corrections were made to metric conversions reported incorrectly in the Proposed RMP.

Livestock Grazing

- Management action Grazing-6017 was revised to clarify that at the time a permittee or lessee voluntarily relinquishes a permit or lease, the BLM will consider whether the public lands where that permitted use was authorized should remain available for livestock grazing or be used for other resource management objectives, such as reserve common allotments or fire breaks. This revision was recommended by the Governor during the Governor’s Consistency Review.
- Definitions for “grazing relinquishments” and “transfer of grazing preferences” were added to the Glossary in order to inform readers what these statements refer to when applied to certain management decisions.
- Compliance with Wyoming Executive Order 2013-3 was moved from management action SS WL-4010 to Grazing-6017 to consolidate the livestock grazing management actions and for consistency with the other Wyoming RMPs.

Lands and Realty

- Management action L&R-6012 was revised to clarify when public lands could be disposed of within Greater Sage-Grouse habitat, as recommended by the Governor during the Governor’s Consistency Review.

Other Leasable Minerals

- Management action OL-2001 was revised to allow non-energy leasable mineral activities in PHMA, provided that the activities can be completed in compliance with all occupancy, timing, density, and disturbance restrictions as recommended by the Governor during the Governor’s Consistency Review.

Recreation

- Management action Rec-6015 was revised to clarify that construction of recreation facilities within Greater Sage-Grouse PHMA must conform with the avoidance and minimization measures or provide a net conservation gain to the species. The revision was recommended by the Governor during the Governor’s Consistency Review.

Riparian and Wetland Communities

- Management action Riparian-4008 was revised to clarify that a site-specific plan would be required prior to authorization of activities within 500 feet of riparian and wetland communities, as recommended by the Governor during the Governor’s Consistency Review.

Special Status Species (Greater Sage-Grouse)

- Management actions were revised to consolidate the activity being managed. Powerline related actions were consolidated in SS WL-4022 and vegetation management actions were consolidated in SS WL-4013.
- Text revisions were made to management actions and fluid mineral lease stipulations to ensure consistency across the Wyoming RMPs and consistency with the most recent Governor's executive order (2015-4), as recommended by the Governor during the Governor's Consistency Review.
- Management action SS WL-4022 was revised to replace the requirement for raptor perch deterrents on overhead powerlines to constructing powerlines in accordance with Avian Power Line Interaction Committee (APLIC) guidance as perch deterrents have been proven to be ineffective, as recommended during protests and by the Governor during the Governor's Consistency Review.

Valid Existing Rights

- A definition of valid existing rights was added to the Glossary as recommended by the Governor during the Governor's Consistency Review.

Water

- Several water management actions were revised as recommended by the Governor during the Governor's Consistency Review including:
 - Water-1005, a statement on management of Source Water Protection Areas was added.
 - Water-1010 and Water-1011, identification of the requirement to coordinate with the Wyoming State Engineer's Office was added.
 - Water-1013 was revised to clarify that a site-specific plan would be required prior to authorization of activities within 500 feet of water resources.

Wildlife

- Management action WL-4014 was revised to clarify that powerlines will be constructed in accordance with APLIC guidance and not standards, as recommended in the protests and by the Governor during the Governor's Consistency Review.

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Chapter 2. Approved Resource Management Plan for Greater Sage-Grouse Habitat

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2.1. Description of Greater Sage-Grouse Habitat Management Areas

The decision area for Greater Sage-Grouse habitat management within this Approved Resource Management Plan (RMP) is Bureau of Land Management (BLM)-administered lands in Greater Sage-Grouse habitat management areas, including surface and split estate lands with BLM subsurface mineral rights. Greater Sage-Grouse habitat on BLM-administered lands in the decision area consists of lands allocated as Priority Habitat Management Areas (PHMAs) and General Habitat Management Areas (GHMAs) (see Table 2.1, “Acres of PHMA and GHMA in the Decision Area for the Approved RMP” (p. 16), Table 2.2, “Acres of Greater Sage-Grouse Habitat by County in the Decision Area (BLM-administered Lands Only)” (p. 16), and Figure 2.1, “Buffalo Greater Sage-Grouse Habitat Management Areas for BLM-administered Lands” (p. 17)).

PHMA and GHMA are defined as follows:

- **PHMA:** BLM-administered lands identified as having the highest value to maintaining sustainable Greater Sage-Grouse populations. The boundaries and management strategies for PHMA are derived from and generally follow the Preliminary Priority Habitat boundaries identified in the Proposed RMP and Final Environmental Impact Statement (EIS). Areas of PHMA largely coincide with areas identified as Priority Areas for Conservation (PACs) in the Conservation Objectives Team (COT) report (USFWS 2013). These areas are consistent with Core Population Areas and Core Population Connectivity Corridors, per version 3 of the State of Wyoming Executive Order (EO) Greater Sage-Grouse Core Area Protection (WY EO 2011-5) (Wyoming Office of the Governor 2011).
- **GHMA:** BLM-administered lands where some special management would apply to sustain Greater Sage-Grouse populations. The boundaries and management strategies for GHMA are derived from and generally follow the Preliminary General Habitat boundaries identified in the Proposed RMP and Final EIS. These areas are consistent with Non-Core Habitat Areas, per version 3 of the State of Wyoming EO Greater Sage-Grouse Core Area Protection (WY EO 2011-5) (Wyoming Office of the Governor 2011).
- **Sagebrush Focal Area:** A subset of PHMA. The Sagebrush Focal Areas were derived from Greater Sage-Grouse stronghold areas described in a U.S. Fish and Wildlife Service (USFWS) memorandum to the BLM titled Greater Sage-Grouse: Additional Recommendations to Refine Land Use Allocations in Highly Important Landscapes (USFWS 2014). The memorandum and associated maps provided by the USFWS identify areas that represent recognized strongholds for Greater Sage-Grouse that have been noted and referenced as having the highest densities of Greater Sage-Grouse and other criteria important for the persistence of the species. There are no Sagebrush Focal Areas in the Buffalo planning area.

Table 2.1. Acres of PHMA and GHMA in the Decision Area for the Approved RMP

Surface Land Management	Priority Habitat Management Areas	General Habitat Management Areas
BLM-administered Surface Estate	137,451	627,824
BLM-administered Mineral Estate	674,923	2,613,535
Source: BLM 2015a		
BLM Bureau of Land Management GHMA General Habitat Management Area PHMA Priority Habitat Management Area RMP Resource Management Plan		

Table 2.2. Acres of Greater Sage-Grouse Habitat by County in the Decision Area (BLM-administered Lands Only)

County	Priority Habitat Management Area		General Habitat Management Area	
	BLM Surface Estate	BLM Mineral Estate	BLM Surface Estate	BLM Mineral Estate
Campbell	21,644	112,373	194,757	1,458,549
Johnson	99,633	448,970	399,497	947,047
Sheridan	16,174	113,580	33,570	207,939
Grand Total	137,451	674,923	627,824	2,613,535
Source: BLM 2015a				
BLM Bureau of Land Management				

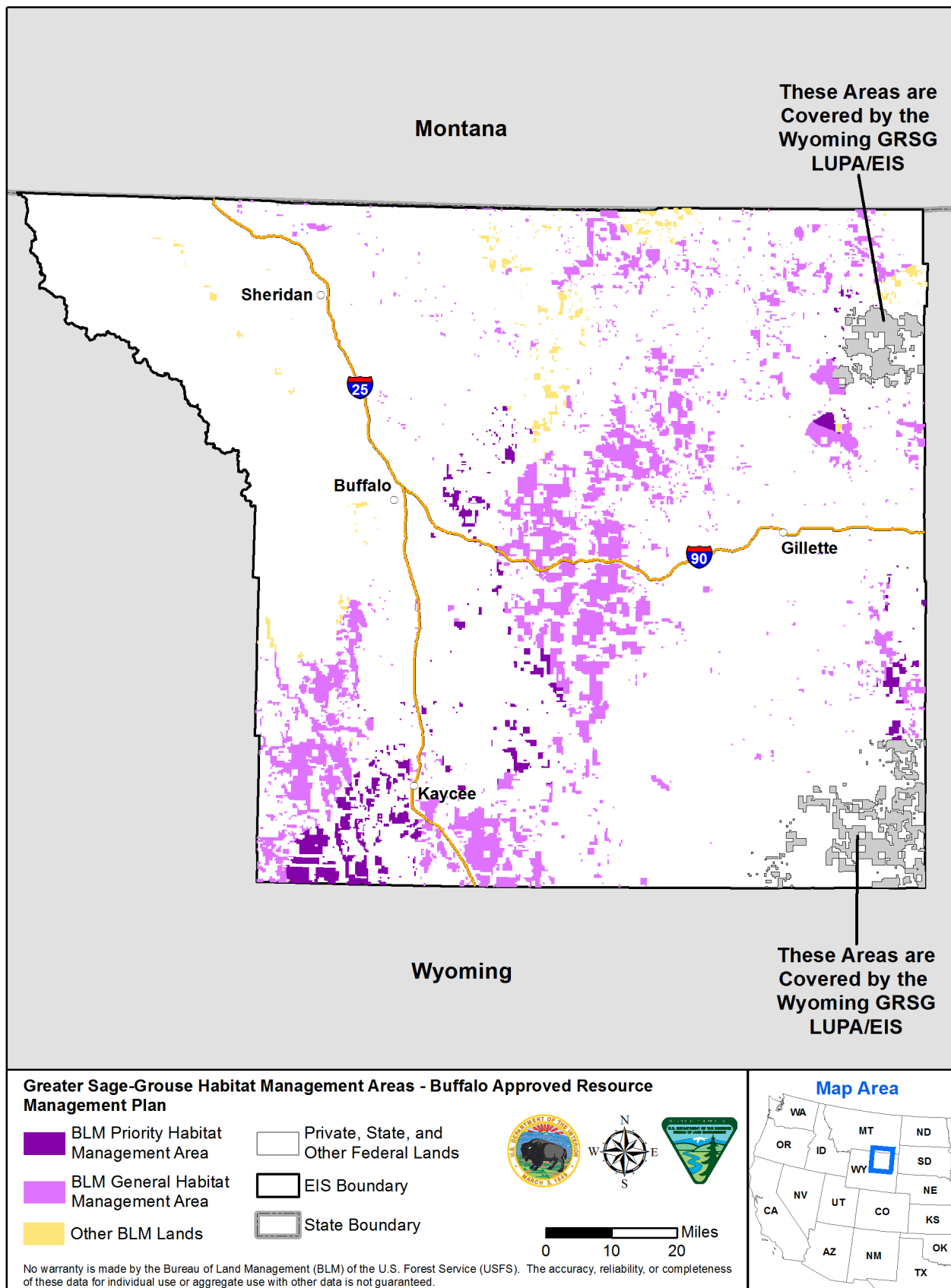


Figure 2.1. Buffalo Greater Sage-Grouse Habitat Management Areas for BLM-administered Lands

*Chapter 2 Approved Resource Management Plan
for Greater Sage-Grouse Habitat
Description of Greater Sage-Grouse Habitat
Management Areas*

2.2. Buffalo Field Office Greater Sage-Grouse Conservation Summary

The Approved RMP identifies and incorporates conservation measures to protect, restore, and enhance Greater Sage-Grouse habitat by avoiding, minimizing, and compensating for unavoidable impacts of threats to Greater Sage-Grouse habitat. The Approved RMP addresses threats to Greater Sage-Grouse and its habitat identified by the USFWS in the March 2010 listing decision, as well as those threats described in the USFWS's COT Report. Per the COT Report, the USFWS identified threats by Greater Sage-Grouse population across the range and stated whether that threat is present and widespread, present but localized, or unknown for that specific population. Table 2.3, "Threats to Greater Sage-Grouse in the Buffalo Field Office as identified by the Conservation Objectives Team Report" (p. 19), identifies the Greater Sage-Grouse populations and threats contained within the Buffalo planning area.

Table 2.3. Threats to Greater Sage-Grouse in the Buffalo Field Office as identified by the Conservation Objectives Team Report

Greater Sage-Grouse Identified Population from the COT Report Applicable to the Buffalo Field Office	Threats														
	Unit Number	Management Zone	Isolated Small Size	Sagebrush Elimination	Agriculture Conversion	Fire	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Improper Grazing	Free-Roaming Equids	Recreation	Urbanization
Powder River Basin (WY)	3	1	N	L	N	L	L	Y	Y	Y	Y	Y	N	Y	L
Source: USFWS 2013 COT Conservation Objectives Team L Threat present, but localized N Threat is not known to be present U Unknown W Wyoming Y Threat is present and widespread															

Table 2.4, “Key Components of the Buffalo Greater Sage-Grouse Approved RMP Addressing COT Report Threats” (p. 20), provides a crosswalk as to how the Approved RMP for the Buffalo Field Office addresses the threats from the COT Report.

Table 2.4. Key Components of the Buffalo Greater Sage-Grouse Approved RMP Addressing COT Report Threats

Threats to Greater Sage-Grouse and its Habitat (from COT Report)	Key Component of the Buffalo Approved RMP
All threats	● Implement the Adaptive Management Plan, which provides regulatory assurance that unintended negative impacts to Greater Sage-Grouse habitat will be addressed before consequences become severe or irreversible. ● PHMA: Require and ensure mitigation that provides a net conservation gain to Greater Sage-Grouse. ● Monitor implementation and effectiveness of conservation measures in Greater Sage-Grouse habitats according to the Habitat Assessment Framework.
All development threats including mining, infrastructure, and energy development	● PHMA: Implement an anthropogenic disturbance cap of 5 percent at the project-area scale. Within Core Population Areas of PHMA, limit disturbance to 1 energy or mining facility per 640 acres. ● PHMA: Implement a density cap of an average of 1 energy and mining activity per 640 acres within Core Population Areas. ● PHMA: Surface occupancy and surface-disturbing activities would be prohibited on or within a 0.6-mile radius of the perimeter of occupied Greater Sage-Grouse leks. ● GHMA: Surface occupancy and surface-disturbing activities would be prohibited on or within a 0.25-mile radius of the perimeter of occupied Greater Sage-Grouse leks. ● Apply Required Design Features when authorizing actions in Greater Sage-Grouse habitat. ● Inform infrastructure siting in Greater Sage-Grouse habitat through best available science and monitoring to minimize indirect effects.
Energy development—fluid minerals	● PHMA: Open to fluid mineral leasing subject to NSO stipulation within 0.6 mile of an occupied lek. TL stipulation from March 15 to June 30 within Core Population Areas and within 4.0 miles of occupied leks within Core Population Connectivity Corridors. ● GHMA: Open to fluid mineral leasing subject to NSO within 0.25 mile of an occupied lek and TL stipulations of 2.0 miles from March 15 to June 30. ● Prioritize the leasing and development of fluid mineral resources outside Greater Sage-Grouse habitat.
Energy development—wind energy	● PHMA: Avoidance area (may be available for wind-energy development with special stipulations).
Infrastructure—major ROWs	● PHMA: Avoidance area (may be available for major ROWs with special stipulations).
Infrastructure—minor ROWs	● PHMA: Avoidance area (may be available for minor ROWs with special stipulations).
Mining—locatable minerals	● Apply RDFs to locatable minerals consistent with applicable law.

Threats to Greater Sage-Grouse and its Habitat (from COT Report)	Key Component of the Buffalo Approved RMP
Mining—coal	PHMA is essential habitat for Greater Sage-Grouse for purposes of the suitability criteria set forth at 43 CFR 3461.5(o)(1).
Improper livestock grazing	- Prioritize the review and processing of grazing permits/leases in PHMAs. - The NEPA analysis for renewals and modifications of grazing permits/leases will include specific management thresholds, based on the Greater Sage-Grouse Habitat Objectives Table, Land Health Standards, and ecological site potential, to allow adjustments to grazing that have already been subjected to NEPA analysis. - Prioritize field checks in PHMAs to ensure compliance with the terms and conditions of grazing permits.
Free-roaming equid management	Not applicable to the planning area.
Range management structures	Allow range improvements which do not impact Greater Sage-Grouse, or which provide a conservation benefit to Greater Sage-Grouse such as fences for protecting important seasonal habitats.
Recreation	PHMA: Do not construct new recreation facilities.
Fire	- PHMA: Prioritize suppression immediately after life and property to conserve the habitat. - GHMA: Prioritize suppression where wildfires threaten PHMA.
Non-native, invasive plant species	- Improve Greater Sage-Grouse habitat by treating annual grasses. - Treat sites in PHMA and GHMA that contain invasive species infestations through an integrated pest management approach.
Sagebrush removal	- PHMA: Maintain all lands ecologically capable of producing sagebrush (but no less than 70 percent) with a minimum of 15 percent sagebrush cover or as consistent with specific ecological site conditions. - All BLM use authorizations will contain terms and conditions regarding the actions needed to meet or progress toward meeting the habitat objectives for Greater Sage-Grouse.
Pinyon and/or juniper expansion	Remove conifers encroaching into sagebrush habitats, prioritizing occupied Greater Sage-Grouse habitat.
Agricultural conversion and exurban development	Retain the majority of PHMA in federal management.
BLM Bureau of Land Management CFR Code of Federal Regulations COT Conservation Objectives Team GHMA General Habitat Management Area NEPA National Environmental Policy Act NSO No Surface Occupancy PHMA Priority Herd Management Area RDF Required Design Feature RMP Resource Management Plan ROW right-of-way TL Timing Limitation	

While energy development has been identified as the primary threat to the Greater Sage-Grouse within its eastern range, this area is not immune to the threat of wildfire. Within the Rocky Mountain Region, wildfire was identified by the COT Final Report (USFWS 2013) as a present and widespread threat in 7 of 13 PACs and as a present but localized threat in the remaining PACs

including the Powder River Basin. Fire is a naturally occurring disturbance in sagebrush steppe and the incursion of nonnative annual grasses is facilitating an increase in mean fire frequency, which can preclude the opportunity for sagebrush to become re-established. As such, the RMP and EIS includes requirements that landscape scale Fire and Invasives Assessments be completed and updated regularly to more accurately define specific areas to be treated to address threats to sagebrush steppe habitat. Within the Rocky Mountain Region, assessments have not yet been completed but will be scheduled based on the need to identify and address potential threats. Additionally, the Secretary of the Interior issued Secretarial Order 3336 on January 5, 2015, which establishes the protection, conservation and restoration of “the health of the sagebrush-steppe ecosystem and, in particular, Greater Sage-Grouse habitat, while maintaining safe and efficient operations as a critical fire management priority for the Department.” The Secretarial Order will result in a final report of activities to be implemented prior to the 2016 western fire season. This will include prioritization and allocation of fire resources and the integration of emerging science, enhancing existing tools to implement the RMP and improve the BLM’s ability to protect sagebrush-steppe from damaging wildfires.

The Approved RMP identifies conservation measures that are designed to conserve, enhance, and restore Greater Sage-Grouse habitat. The Approved RMP applies the following summarized management decisions, subject to valid existing rights, to other uses and resources, such as:

- Minimize additional surface disturbance
- Require specific design features for certain lands and resource uses
- Improve habitat condition
- Include Greater Sage-Grouse seasonal habitat objectives
- Reduce threat of rangeland fire to Greater Sage-Grouse and sagebrush habitat

The Approved RMP also establishes screening criteria and conditions for new anthropogenic activities in PHMA and GHMA to ensure a net conservation gain for Greater Sage-Grouse populations and habitat, consistent with the State of Wyoming Core Area Protection Strategy. The Approved RMP will reduce habitat disturbance and fragmentation through limitations on surface-disturbing activities, while addressing changes in resource condition and use through monitoring and adaptive management.

The Approved RMP’s Greater Sage-Grouse habitat management approach was built upon the foundation for Greater Sage-Grouse management established by and complementary to the Governor’s EO 2011-05, Greater Sage Grouse Core Area Protection (Core Area Strategy) (Wyoming Office of the Governor 2011), by establishing similar conservation measures and focusing restoration efforts in the same key areas most valuable to Greater Sage-Grouse. On July 29, 2015, the State of Wyoming issued Executive Order 2015-4 which replaced Executive Orders 2011-5 and 2013-3. Through the Governor’s Consistency Review of the Plan, it was determined that guidance and recommendations provided in EO 2015-4 were consistent with the Proposed RMP issued on May 29, 2015. Therefore, throughout the plan, references to the State of Wyoming’s Core Area Protection strategy were updated to reference EO 2015-4. In addition, EO 2015-4 modified the Core Area boundaries, the boundary changes are inconsistent with the maps and acreages presented in the Proposed RMP and therefore EO 2011-5 remains the reference for the Core Area boundaries.

Conservation of Greater Sage-Grouse is a large-scale challenge that requires a landscape-scale solution that spans 11 western states. The Buffalo Approved RMP would achieve the consistent, range-wide conservation objectives as outlined below. Additionally, the Buffalo Approved RMP would align with the State of Wyoming’s priorities and land management approaches.

2.3. Goals, Objectives, and Management Decisions for Greater Sage-Grouse Habitat

This section of the Approved RMP presents the goals, objectives, land use allocations, and management actions established for protecting and preserving Greater Sage-Grouse and its habitat on public lands managed by the BLM in the Buffalo planning area. A *Monitoring Framework* is also included (in Appendix D (p. 325)) to describe how the program decisions will be tracked to ensure implementation.

Many of the goals, objectives, and management actions identified in this section can also be found in Chapter 3, *Approved Resource Management Plan* (p. 79), of this Approved RMP for other resources and/or program areas (e.g., Physical Resources) and have been consolidated in this section to depict how the agency will manage Greater Sage-Grouse habitat. For this reason, the goals, objectives, and management actions in this section are not paginated and retain the title/record number as they are presented in Chapter 3, *Approved Resource Management Plan* (p. 79).

Table 2.5, “Summary of Allocation Decisions by Greater Sage-Grouse Habitat Management Areas” (p. 23), is a summary of the allocation decisions presented for each Greater Sage-Grouse habitat management area. For allocation decisions specific to PHMA and GHMA, refer to the Greater Sage-Grouse habitat management maps (Maps 2-1 through 2-10) in Appendix A (p. 219).

Table 2.5. Summary of Allocation Decisions by Greater Sage-Grouse Habitat Management Areas

Resource	Priority Habitat Management Area	General Habitat Management Area
Land Tenure	Retain 103,277 (13%)	Retain 547,587 (70%)
	Dispose where GRSG benefit 34,174 (5%)	Dispose where GRSG benefit 80,237 (10%)
Renewable Energy	Open 38 (0%)	Open 53,197 (7%)
	Avoidance 68,800 (9%)	Avoidance 298,685 (38%)
	Exclusion 68,613 (9%)	Exclusion 275,942 (35%)
Major ROWs	Open 3,065 (0.4%)	Open 27,973 (4%)
Minor ROWs	Avoidance 49,741 (6%)	Avoidance 264,032 (34%)
	Exclusion 27,037 (3%)	Exclusion 51,373 (6%)

Resource	Priority Habitat Management Area	General Habitat Management Area
Oil and Gas	Open Subject to Standard Lease Forms 5,294 (0.7%)	Open Subject to Standard Lease Forms 220,050 (6%)
	Open with Moderate Constraints 573,587 (17%)	Open with Moderate Constraints 1,867,165 (55%)
	Open with Major Constraints 68,661 (2%)	Open with Major Constraints 482,339 (14%)
	Closed 27,299 (1%)	Closed 43,512 (1%)
Non-energy Leasables	Not Applicable	Not Applicable
Salable Minerals	Open 551,017 (16%)	Open 1,978,387 (59%)
Locatable Minerals	Recommended for Withdrawal 22,515 (3%)	Recommended for Withdrawal 58,788 (2%)
Travel Management	Designated Routes	Designated Routes
Livestock Grazing	Open 135,209 (17%)	Open 620,094 (79%)
	Incompatible 2,282 (0.3%)	Incompatible 6,920 (0.9%)
Note: Numbers are in acres. % percent of BLM-administered estate GRSG Greater Sage-Grouse ROW right-of-way		

Minimize additional surface disturbance. The most effective way to conserve the Greater Sage-Grouse is to protect existing, intact habitat. The BLM would aim to reduce habitat fragmentation and protect key habitat areas. The Buffalo Approved RMP would minimize surface disturbance on over 700,000 acres of BLM-administered lands by allocating lands as PHMA and GHMA with decisions that aim to conserve Greater Sage-Grouse habitat. Appendix J (p. 429) provides the acreage of projected surface disturbance from the Approved RMP over the life of the plan.

The limitations on mineral and right-of-way (ROW) development along with the disturbance cap, lek buffers, and adaptive management would result in a net conservation gain for Greater Sage-Grouse. The Approved RMP prioritizes oil and gas development outside of Greater Sage-Grouse habitat and focuses on a landscape-scale approach to conserving Greater Sage-Grouse habitat. In the context of the planning area, land use allocations under the Approved RMP would limit or eliminate new surface disturbances in PHMA.

The BLM also updated the Approved RMP to reflect new Greater Sage-Grouse state conservation strategies, including recent State EOs. The objectives of these documents are consistent with the State of Wyoming's Core Area Protection Strategy, which is designed to protect Greater Sage-Grouse and its habitat within core population areas using a suite of tools and mechanisms that work in concert to conserve Greater Sage-Grouse by reducing habitat loss and fragmentation through lek buffers, disturbance limits, exclusion of activities, and a sophisticated mapping utility to monitor the amount and density of disturbance.

Improve habitat condition. While restoring lost sagebrush habitat can be very difficult in the short term, particularly in the most arid areas, it is often possible to enhance habitat quality

through purposeful management. The Buffalo Approved RMP commits to management actions necessary to achieve science-based vegetation and Greater Sage-Grouse habitat management objectives established in the Approved RMP. Habitat restoration and vegetation management actions would improve Greater Sage-Grouse habitat and prioritize restoration to benefit PHMA. As a result, the restoration and management of vegetation actions would focus on Greater Sage-Grouse. For mitigation, the BLM would coordinate with the Wyoming Sage Grouse Implementation Team for application of the "avoid, minimize, compensate" process to ensure anthropogenic activities result in a net conservation gain for Greater Sage-Grouse habitat. The Approved RMP also includes a process for monitoring and adapting to changing conditions on the landscape. Using monitoring data for population and sagebrush canopy cover, the adaptive management strategy would apply more restrictive management where there is a consistent downward trend. The cause of the downward trend (e.g., anthropogenic disturbance, fire, disease) would be identified through monitoring data.

Reduce threat of rangeland fire to Greater Sage-Grouse and sagebrush habitat. Rangeland fire can destroy sagebrush habitat and lead to the conversion of previously healthy habitat into landscapes dominated by invasive species. The Buffalo Approved RMP incorporates Secretarial Order 3336 and sets forth protocols to improve the BLM's ability to protect Greater Sage-Grouse habitat from damaging wildfire. Prescribed fire would only be used to improve or maintain habitat for Greater Sage-Grouse to meet specific fuel objective standards.

Table 2.6, "Seasonal Habitat Desired Conditions for Greater Sage-Grouse" (p. 26), summarizes the characteristics that research has found represent the seasonal habitat needs for Greater Sage-Grouse. The specific seasonal components identified in the table were adjusted based on local science and monitoring data to define the range of characteristics used in this subregion. Thus, the habitat objectives provide the broad vegetative conditions the BLM strives to obtain across the landscape that indicate the seasonal habitats used by Greater Sage-Grouse. These habitat indicators are consistent with the rangeland health indicators used by the BLM.

The habitat objectives will be part of the Greater Sage-Grouse habitat assessment to be used during land health evaluations (see Appendix X (p. 781)). These habitat objectives are not obtainable on every acre within the designated Greater Sage-Grouse habitat. Therefore, the determination on whether the objectives have been met will be based on the specific site's ecological ability to meet the desired condition identified in the table. All Desired Conditions will be dependent upon site capability and local variation (e.g., weather patterns, localized drought, Ecological Site Description state, etc.).

All BLM use authorizations will contain terms and conditions regarding the actions needed to meet or progress toward meeting the habitat objectives. If monitoring data show the habitat objectives have not been met nor progress being made towards meeting them, there will be an evaluation and a determination made as to the cause. If it is determined that the authorized use is a cause, the use will be adjusted by the response specified in the instrument that authorized the use.

Table 2.6. Seasonal Habitat Desired Conditions for Greater Sage-Grouse

ATTRIBUTE	INDICATOR	DESIRED CONDITION ⁷	REFERENCES
BREEDING HABITAT (LEK AND NESTING/EARLY BROOD-REARING)			Doherty. 2008. Sage-grouse and Energy Development: Integrating Science with Conservation Planning to Reduce Impacts. Holloran and Anderson. 2005. Spatial Distribution of Greater Sage-grouse nests in relatively contiguous sagebrush habitats.
Lek Security	Proximity of trees	Trees absent or uncommon on shrub/grassland ecological sites within 1.86 miles (3 kilometers) of occupied leks.	Baruch-Mordo, S., J.S. Evans, J.P. Severson, D.E. Naugle, J.D. Maestas, J. M. Kiesecker, M.J. Falkowski, C.A. Hagen, and K.P. Reese. 2013. Saving sage-grouse from trees. Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. 2015. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference 6710-1. U.S. Bureau of Land Management, Denver, Colorado.
	Proximity of sagebrush to leks	Adjacent protective sagebrush cover within 330 feet (approximately 100 meters) of an occupied lek.	Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. 2015. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference 6710-1. U.S. Bureau of Land Management, Denver, Colorado.
NESTING/EARLY BROOD-REARING⁵			

ATTRIBUTE	INDICATOR	DESIRED CONDITION ⁷	REFERENCES
Cover and Food	Seasonal habitat extent	>80% of the nesting habitat meets the recommended vegetation characteristics, where appropriate (relative to ecological site potential, etc.).	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.
	Sagebrush cover ²	5–25%	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985. Connelly, J.W., K.P. Reese, and M.A. Schroeder. 2003. Monitoring of Greater sage-grouse habitats and populations. University of Idaho College of Natural Resources Experiment Station Bulletin 80. University of Idaho, Moscow, ID. Hagen, C.A., J.W. Connelly, and M.A. Schroeder. 2007. A meta-analysis of greater sage-grouse <i>Centrocercus urophasianus</i> nesting and brood-rearing habitats. Wildlife Biology 13 (Supplement 1):42-50. Wyoming Executive Order No. 2011-5. 2011. Greater Sage-Grouse Core Area Protection: Casper, Wyoming, Governor's Office, State of Wyoming. June 2, 2011.
	Sagebrush height Arid sites ³ Mesic sites ⁴	4–31 inches (10–80 centimeters) 12–31 inches (30–80 centimeters)	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.

ATTRIBUTE	INDICATOR	DESIRED CONDITION ⁷	REFERENCES
	Predominant sagebrush shape	Predominantly spreading shape ⁵	Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. 2015. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference 6710-1. U.S. Bureau of Land Management, Denver, Colorado.
	Perennial grass cover (such as native bunchgrasses) ²		Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.
	Arid sites ³	≥10%	Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. 2015. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference 6710-1. U.S. Bureau of Land Management, Denver, Colorado.
	Mesic sites ⁴	≥15%	Cagney, J., E. Bainter, B. Budd, T. Christiansen, V. Herren, M. Holloran, B. Rashford, M. Smith and J. Williams. 2010. Grazing influence, objective development, and management in Wyoming's greater sage-grouse habitat. University of Wyoming College of Agriculture Extension Bulletin B-1203. Laramie.
		Cool-season bunchgrasses preferred	

ATTRIBUTE	INDICATOR	DESIRED CONDITION ⁷	REFERENCES
	Perennial grass height (includes residual grasses)	Adequate nest cover ≥ 7 inches (17.78 centimeters) or as determined by Ecological Site Description site potential and local variability.	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985. Connelly, J.W., K.P. Reese, and M.A. Schroeder. 2003. Monitoring of Greater sage-grouse habitats and populations. University of Idaho College of Natural Resources Experiment Station Bulletin 80. University of Idaho, Moscow, ID. Doherty, K.E., D.E. Naugle, J.D. Tack, B.L. Walker, J.M. Graham, and J.L. Beck. 2014. Linking Conservation Actions to Demography: Grass Height Explains Variation in Greater Sage-grouse Nest Survival. Wildlife Biology, 20(6):320–325. Hagen, C.A., J.W. Connelly, and M.A. Schroeder. 2007. A meta-analysis of greater sage-grouse <i>Centrocercus urophasianus</i> nesting and brood-rearing habitats. Wildlife Biology 13 (Supplement 1):42-50. Herman-Brunson, K.M., K.C. Jensen, N.W. Kaczor, C.C. Swanson, M.A. Rumble, and R.W. Klaver. 2009. Nesting Ecology of Greater Sage-Grouse <i>Centrocercus urophasianus</i> at the Easter Edge of their Historic Distribution. Wildl. Biol. 15:237-246.

ATTRIBUTE	INDICATOR	DESIRED CONDITION ⁷	REFERENCES
			Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. 2015. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference 6710-1. U.S. Bureau of Land Management, Denver, Colorado.
	Perennial forb cover ² Arid sites ³ Mesic sites ⁴	≥5% ≥10%	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.
	Perennial forb availability	Preferred forbs are common with several species present	Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. 2015. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference 6710-1. U.S. Bureau of Land Management, Denver, Colorado.
LATE BROOD-REARING/SUMMER¹ (July-October)¹ (Apply to all habitat outside of nesting/breeding and winter)			
Cover and Food	Seasonal habitat extent	>40% of the summer/brood habitat meets recommended brood habitat characteristics where appropriate (relative to ecological site potential, etc.)	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.

ATTRIBUTE	INDICATOR	DESIRED CONDITION ⁷	REFERENCES
	Sagebrush cover ²	5–25%	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985. Wyoming Executive Order No. 2011-5. 2011. Greater Sage-Grouse Core Area Protection: Casper, Wyoming, Governor's Office, State of Wyoming. June 2, 2011.
	Sagebrush height	4–32 inches (20.3–80 centimeters)	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.
	Perennial grass canopy cover ²	>15%	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.
	Upland and riparian perennial forb availability ²	Preferred forbs are common with several preferred species present ⁶	Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. 2015. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference 6710-1. U.S. Bureau of Land Management, Denver, Colorado.

ATTRIBUTE	INDICATOR	DESIRED CONDITION ⁷	REFERENCES
	Riparian meadow habitat condition	Proper functioning condition	Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. 2015. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference 6710-1. U.S. Bureau of Land Management, Denver, Colorado.
WINTER¹ November-March¹ (Apply to areas of known or likely winter-use)			
Cover and Food	Seasonal habitat extent	>80% of the wintering habitat meets winter habitat characteristics where appropriate (relative to ecological site, etc.).	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.
	Sagebrush cover above snow ²	>5%	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985. Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. 2015. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference 6710-1. U.S. Bureau of Land Management, Denver, Colorado. Wyoming Executive Order No. 2011-5. 2011. Greater Sage-Grouse Core Area Protection: Casper, Wyoming, Governor's Office, State of Wyoming. June 2, 2011.

ATTRIBUTE	INDICATOR	DESIRED CONDITION ⁷	REFERENCES
	Sagebrush height above snow	>10 inches (>25 centimeters)	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.
¹ Where credible data support different seasonal dates than those identified, dates may be shifted <i>but the amount of days cannot be shortened or lengthened by the local unit.</i> ² Absolute cover is the actual recorded cover and can exceed 100% when recorded across all species and all layers. It is not relative cover, which is the proportions of each species, and equals 100%. Note that cover is reported for only those species (e.g., sagebrush, preferred forbs) that are sampled to determine suitability of habitat for Greater Sage-Grouse. Overall cover at the site will be greater than that sampled for Greater Sage-Grouse habitat, due to other species present. ³ Arid corresponds to the 10 – 12 inch precipitation zone; <i>Artemisia tridentata wyomingensis</i> is a common big sagebrush sub-species for this type of site (Stiver et al. 2015). ⁴ Mesic corresponds to the ≥12 inch precipitation zone; <i>Artemisia tridentata vaseyana</i> is a common big sagebrush sub-species for this type of site (Stiver et al. 2015). ⁵ Collectively, the indicators for sagebrush (cover, height, and shape), perennial grass and perennial forb (cover, height and/or availability) represent the desired condition range for nesting/early brood-rearing habitat characteristics, consistent with the breeding habitat suitability matrix identified in Stiver et al. 2015. Sagebrush plants that are more tree or columnar-shaped provide less protective cover near the ground than sagebrush plants with a spreading shape (Stiver et al. 2015). Some sagebrush plants are naturally columnar (e.g., Great Basin big sagebrush), and a natural part of the plant community. However, a predominance of columnar shape arising from animal impacts may warrant management investigation or adjustments at site specific scales. ⁶ Preferred forbs are listed in Stiver et al. 2015. Overall total forb cover may be greater than that of preferred forb cover, because not all forb species are listed as preferred. ⁷ All Desired Conditions will be dependent upon site capability and local variation (e.g., weather patterns, localized drought, Ecological Site Description state). > greater than ≥ greater than or equal to % percent			

Table 2.7, “4000 BIOLOGICAL RESOURCES (BR) – SPECIAL STATUS SPECIES” (p. 34), identifies the goals, objectives, and management actions for Greater Sage-Grouse. Note: this table retains the title/record numbers as they are presented in Chapter 3, *Approved Resource Management Plan* (p. 79).

Table 2.7. 4000 BIOLOGICAL RESOURCES (BR) – SPECIAL STATUS SPECIES

GOAL BR:10 Distribution and abundance of all special status species are optimized. Objectives: BR:10.1 Maintain or enhance special status species plant communities and habitats. BR:10.2 Manage BLM-administered lands to maintain or restore populations and habitat consistent with conservation requirements for special status species. BR:10.3 Develop effective conservation and cooperative management plans, strategies, and agreements with stakeholders. GOAL BR:11 Sustainable sagebrush habitats that provide the quantity, quality, and connectivity that is necessary to maintain sustainable populations of Greater Sage-Grouse and other special status species. Objectives: BR:11.1 Maintain large patches of high quality interconnected sagebrush habitats, with emphasis on patches occupied by Greater Sage-Grouse. BR:11.2 Maintain connectivity between and within sagebrush habitats with emphasis on communities occupied by Greater Sage-Grouse. BR:11.3 In all PHMA, the desired condition is to maintain all lands ecologically capable of producing sagebrush (but no less than 70%) with a minimum of 15% sagebrush cover or as consistent with specific ecological site conditions. The attributes necessary to sustain these habitats are described in Interpreting Indicators of Rangeland Health (BLM Tech Ref 1734-6). GOAL BR:12 Successful restoration and rehabilitation of potential Greater Sage-Grouse habitat across the planning area. Objectives: BR:12.1 Reestablish sagebrush corridors, where feasible, between Greater Sage-Grouse occupied habitats. BR:12.2 Reconnect large patches of sagebrush habitat with emphasis on reconnecting patches occupied by stronghold and isolated populations of Greater Sage-Grouse.		
Record #	Goal/Obj.	Decision
SS WL-4001	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:12.1 BR:12.2	Utilize current research, management and conservation plans, and similar related documents to guide special status species habitat management.
SS WL-4002	BR:10.3	Implement actions set forth in recovery plans, conservation measures, terms and conditions, protection measures, and appropriate BMPs and reasonable and prudent measures within biological opinions for Threatened and/or Endangered wildlife species, including those specific to this RMP and any future statewide programmatic biological opinions.

Record #	Goal/Obj.	Decision
SS WL-4003	BR:10.1 BR:10.2 BR:11.1 BR:11.2 BR:12.1 BR:12.2	Maintain (size and quality) or enhance current habitat utilized by special status species. Enlarge/restore habitat on a site-specific basis.
SS WL-4004	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:12.1 BR:12.2	Maintain or enhance the integrity of identified special status wildlife species migration corridors. Manage identified special status wildlife species travel corridors consistent with other resource values.
SS WL-4005	BR:10.2 BR:10.3	Locate and manage facilities to mitigate noise impacts on special status species.
SS WL-4006	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Manage surface-disturbing and disruptive activities to mitigate impacts on special status wildlife species and their habitats.
SS WL-4007	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Apply a CSU stipulation to fluid mineral leases containing special status species habitat. Surveys required for clearance.
SS WL-4010	BR:10.1 BR:10.2 BR:10.3	The BLM will coordinate new recommendations, mitigation, and Greater Sage-Grouse habitat objectives and management considerations with the WGFD and other appropriate agencies, local government cooperators, and the Wyoming Sage-Grouse Implementation Team. These measures will be analyzed in site-specific NEPA documents, as necessary.

Record #	Goal/Obj.	Decision
		The Greater Sage-Grouse adaptive management plan (Appendix D (p. 325)) provides regulatory assurance that unintended negative impacts to Greater Sage-Grouse habitat will be addressed before consequences become severe or irreversible. Projects requiring an EIS shall develop adaptive management strategies in support of the population management objectives for Greater Sage-Grouse set by the State of Wyoming (State of WY EO 2011-05). Adaptive management triggers are essential for identifying when potential management changes are needed in order to continue meeting Greater Sage-Grouse conservation objectives. With respect to Greater Sage-Grouse, all regulatory entities in Wyoming, including the BLM, use soft and hard triggers. Soft and hard triggers are focused on three metrics: (1) number of active leks, (2) acres of available habitat, and (3) population trends based on annual lek counts. Soft Triggers Response: Soft triggers require immediate monitoring and surveillance to determine causal factors and may require curtailment of activities in the short- or long-term, as allowed by law. The project level adaptive management strategies will identify appropriate responses where the project's activities are identified as the causal factor. The management agency (BLM) and the Adaptive Management Working Group will implement an appropriate response strategy to address causal factors not attributable to a specific project or to make adjustments at a larger regional or statewide level. Hard Trigger Response: Upon determination that a hard trigger has been tripped, the BLM will immediately defer issuance of discretionary authorizations for new actions within the Biologically Significant Unit for a period of 90 days. In addition, within 14 days of a determination that a hard trigger has been tripped, the Adaptive Management Working Group will convene to develop an interim response strategy and initiate an assessment to determine the causal factor or factors (hereafter called the causal factor assessment).
SS WL-4011	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Develop avoidance areas restricting the application of broad-spectrum pesticides in areas containing Greater Sage-Grouse nesting and brood-rearing habitats.
SS WL-4012	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:12.1 BR:12.2	Restore Greater Sage-Grouse brood-rearing habitats in wetland/riparian areas. Maintain seeps, springs, wet meadows, and riparian vegetation in a functional and diverse condition for young Greater Sage-Grouse and other species that depend on forbs and insects associated with these areas.

Record #	Goal/Obj.	Decision
SS WL-4013	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:12.1 BR:12.2	Manage vegetation composition, diversity and structure, as determined by ecological site description and WGFD protocols, to achieve Greater Sage-Grouse habitat management objectives, in cooperation with stakeholders. Vegetation treatments in nesting and wintering habitat that would reduce sagebrush canopy cover to less than 15% would not be conducted unless it can be shown to be beneficial to sage-grouse habitat and removal of sagebrush canopy cover below 15% will be subject to the DDCT. For vegetation treatments in sagebrush within PHMAs, refer to Appendix A, WGFD Protocols for Treating Sagebrush to Benefit Sage-Grouse (WGFD 2011, as updated). These recommended protocols, subject to seasonal conditions of approval, would be used in determining whether proposed treatment constitutes a “disturbance” that would contribute toward the 5% threshold for habitat maintenance. Additionally, these protocols would be used to determine whether the proposed treatment configuration would be expected to have neutral or beneficial impacts for PHMA (core only) populations or if they represent additional habitat loss or fragmentation. Treatments to enhance sagebrush/grasslands habitat for sage-grouse would be evaluated based upon habitat quality and the functionality/use of treated habitats post-treatment. The BLM would work collaboratively with partners at the state and local level to maintain and enhance sage-grouse habitats. Seasonal restrictions would be applied, as needed, for implementing fuels management treatments according to the type of seasonal habitat present. Wildland fire burns will be treated as disturbance if sagebrush is reduced below 5% canopy cover, unless there is an implementation plan outlining restoration efforts and 3 years of data showing a trend back to suitable habitat. Burned areas within PHMAs would be restored to suitable habitat with consideration given to ESDs, reference sites, site potential and local variability.
SS WL-4014	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Minimize disturbances that would result in alterations to springs and riparian Greater Sage-Grouse habitat. In coordination with stakeholders, develop alternative water sources to replace natural sources that have been affected or destroyed.
SS WL-4015	BR:10.1 BR:10.2 BR:10.3	Manage stored water to control mosquitoes and prevent the spread of WNV to Greater Sage-Grouse.
SS WL-4016	BR:10.1 BR:10.2 BR:10.3	Design water facilities with protective features to reduce mortality of Greater Sage-Grouse from drowning or entrapment.

Record #	Goal/Obj.	Decision
SS WL-4017	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Design and locate fences to reduce impacts to important Greater Sage-Grouse habitat.
SS WL-4018	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Use the Fire Management Plan to incorporate the most current sagebrush habitat information and to guide fire suppression priorities in sagebrush habitats.
SS WL-4019	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Remove conifers where they have encroached upon Greater Sage-Grouse habitat in cooperation with stakeholders. Reduce the density of conifers that have encroached into, but do not yet dominate sagebrush plant communities.
SS WL-4020	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Inventory, record, and report existing type and condition of BLM fences. Prioritize areas and annually implement modifications to existing fences to reduce hazards to flying Greater Sage-Grouse, in cooperation with stakeholders. All new fences, in priority areas, will be properly designed and located to avoid hazards to flying Greater Sage-Grouse.
SS WL-4021	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Avoid renewable energy (solar and wind) projects in Greater Sage-Grouse Core Population Areas unless it can be demonstrated that the activity would not result in declines of core Greater Sage-Grouse populations. Sufficient demonstration of “no declines” should be coordinated with the WGFD and USFWS.

Record #	Goal/Obj.	Decision
SS WL-4022	BR:10.1 BR:10.2 BR:10.3	Powerlines (distribution and transmission) will be designed to minimize wildlife related impacts. This action includes but is not limited to: • Avoid areas of high avian use such as water bodies (including ponds, lakes, rivers, streams and wetlands), ridge tops, prairie dog colonies, Greater Sage-Grouse Core Population and Core Population Connectivity Corridors, and sharp-tailed grouse leks (PRB Final EIS, EO 2011-05). • Prohibit above ground distribution powerlines unless identified in an approved distribution plan. • <u>PHMA:</u> ○ New transmission lines greater than 115 kV in PHMA (core only) would be allowed only: (1) when located within 0.5 mile or less of an existing 115 kV or greater transmission line or constructed prior to 2008; or (2) in designated RMP corridors authorized for aboveground transmission lines. Transmission lines routed using one or more of the two criteria listed above will not be counted against the DDCT 5% disturbance cap. New transmission lines greater than 115 kV proposed outside of these areas would be considered where it can be demonstrated that declines in Greater Sage-Grouse populations could be avoided through project design and/or mitigation. These projects will be subject to the density and disturbance restrictions for PHMA. Construction of new transmission lines will adhere to the restrictions associated with conducting activities within PHMAs. Review of transmission line proposals would incorporate the Framework for Sage-grouse Impacts Analysis for Interstate Transmission Lines and other appropriate documents consistent with the three routing criteria described above. ○ New electric distribution lines (less than 115 kV) would be buried where feasible and economically feasible. If not economically feasible, distribution lines may be authorized when effectively designed/mitigated to protect Greater Sage-Grouse and the authorized officer determines that overhead installation is the action alternative with the fewest adverse impacts while still meeting the project need. Agricultural and residential lines will be considered to be adequately mitigated for Greater Sage-Grouse if constructed at least 0.6 mile from the lek perimeter with appropriate timing constraints and constructed to the latest APLIC guidance. These ROW authorizations will be subject to approval by the State Director. Within GHMA: Within general Greater Sage-Grouse habitat (outside core population and connectivity areas) overhead powerlines will be located at least 0.5 mile from occupied Greater Sage-Grouse leks (modified from PRB Final EIS). Any new powerlines authorized within the above identified areas will be buried or if overhead then constructed to the latest APLIC guidance (modified from PRB Final EIS). ○ New pipelines through PHMA would be allowed: (1) within an RMP corridor currently authorized for that use or designated through future RMP amendments; or (2) constructed in or adjacent to existing utilities (buried and above-ground) or roads. Pipelines constructed in RMP corridors or adjacent to existing utilities or roads will require completion of a DDCT analysis for baseline data collection but the project is not required to meet the threshold of 5%. However, within 6 months of the completion of construction, the project proponent will provide the authorized officer with as-built drawings so that total disturbance within core area can be calculated annually. PHMA is designated as avoidance areas for high voltage transmission line and pipeline ROWs. All authorizations must comply with the conservation measures outlined in this approved plan, including the RDF and avoidance criteria presented in Appendix C (p. 285) of this document.

Record #	Goal/Obj.	Decision
SS WL-4023	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Lease fluid minerals dependent upon lease location and habitat suitability. Ensure that leasing activities in PHMA comply with Greater Sage-Grouse resource management plan decisions and remain in compliance with laws, regulations and policy.
SS WL-4024	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Apply the following stipulations to fluid mineral leases within Greater Sage-Grouse Core Population Areas: ● NSO prohibiting surface occupancy and disturbing activities, within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). ● CSU within Greater Sage-Grouse Core Population Areas ○ In Greater Sage-Grouse core population areas, the density of disturbance of a facility (oil and gas or mining) would be limited to an average of one site per square mile (640 acres) within the DDCT, subject to valid existing rights and applicable law. The one location and cumulative value of existing disturbances will not exceed 5% of suitable habitat of the DDCT area using the DDCT process. Inside Greater Sage-Grouse (priority habitat) core population areas, all suitable habitat disturbed (any program area) will not exceed 5% of suitable habitat within the DDCT area using the DDCT process. ○ Design and manage facilities to prevent WNV transmission. ○ Locate new Local or Collector roads (as defined in BLM Manual 9113) greater than 1.9 miles from the perimeter of occupied Greater Sage-Grouse leks. Locate new roads greater than 0.6 mile from the perimeter of occupied Greater Sage-Grouse leks. ○ Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. ● TLS prohibiting surface-disturbing and/or disruptive activities from March 15 to June 30 (independent of habitat suitability). Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case-by-case basis. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by up to 14 days prior to or subsequent to the above dates. ● TLS prohibiting surface-disturbing and disruptive activities within mapped Greater Sage-Grouse winter concentration areas, from December 1 to March 14. Activities in unsuitable habitats within PHMAs would be evaluated under the exception and modification criteria and could be allowed on a case-by-case basis. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by up to 14 days prior to or subsequent to the above dates.

Record #	Goal/Obj.	Decision
		Apply the following stipulations to fluid mineral leases within Greater Sage-Grouse Core Population Connectivity Corridors: • NSO prohibiting surface occupancy and disturbing activities, within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). • CSU within Greater Sage-Grouse Population Connectivity Corridors. ○ Inside Greater Sage-Grouse (priority habitat) core population area connectivity corridors, all suitable habitat disturbed (any program area) will not exceed 5% of suitable habitat within the DDCT area using the DDCT process. ○ Design and manage facilities to prevent WNV transmission. ○ Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. • TLS prohibiting surface-disturbing and/or disruptive activities within 4.0 miles of an occupied Greater Sage-Grouse lek, from March 15 to June 30 (independent of habitat suitability and restricted to within Population Connectivity Corridors). Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case by case basis. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by up to 14 days prior to or subsequent to the above dates. • TLS prohibiting surface-disturbing and/or disruptive activities within mapped Greater Sage-Grouse winter concentration areas, from December 1 to March 14. Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case by case basis. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by up to 14 days prior to or subsequent to the above dates.

Record #	Goal/Obj.	Decision
		Apply the following stipulations to fluid mineral leases within Greater Sage-Grouse habitat outside of Core Population Areas and Core Population Connectivity Corridors: • NSO prohibiting surface occupancy and disturbing activities, within 0.25 mile of the perimeter of occupied Greater Sage-Grouse leks. • CSU within 0.25 mile of occupied Greater Sage-Grouse leks. ◦ Design and manage facilities to prevent WNV transmission. • CSU – Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. Recommend for all surface-disturbing activities on BLM surface adjacent to Core or Connectivity Population Areas, or within or adjacent to lands involved in Greater Sage-Grouse conservation projects. • TLS prohibiting surface-disturbing and disruptive activities within 2.0 miles of occupied Greater Sage-Grouse leks, from March 15 to June 30 (independent of habitat suitability). Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case by case basis. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by up to 14 days prior to or subsequent to the above dates. • TLS protecting mapped winter concentration areas, from December 1 to March 14, in GHMA would be implemented only where winter concentration areas are identified as supporting biologically significant numbers of Greater Sage-Grouse nesting in PHMA and/or attending leks within PHMA (core only). Appropriate seasonal timing restrictions and habitat protection measures would be considered and evaluated in consultation with the WGFD in all identified winter concentration areas. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by up to 14 days prior to or subsequent to the above dates. In cases where federal oil and gas leases are or have been issued without stipulated restrictions or requirements that are later found to be necessary, or with stipulated restrictions or requirements later found to be insufficient, consider their inclusion before approving subsequent exploration and development activities. Include these restrictions or requirements only as reasonable measures or as conditions of approval in authorizing APDs or Master Development Plans. Conversely, in cases where leases are or have been issued with stipulated restrictions or requirements that are later found to be excessive or unnecessary, the stipulated restrictions or requirements may be appropriately modified, excepted or waived in authorizing actions. Both the application of reasonable measures or COAs and the modification or exception of stipulated restrictions or requirements must first be based upon site-specific analysis including the necessary supporting NEPA. Note (PHMA and GHMA): The authorized officer may grant an exception if an environmental record of review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavioral needs of Greater Sage-Grouse.

Record #	Goal/Obj.	Decision
SS WL-4025	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Manage Greater Sage-Grouse Core Population Areas as follows: ● Prohibit surface-disturbing activities and occupancy within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). ● In Greater Sage-Grouse core population areas, the density of disturbance of a facility (oil and gas or mining) would be limited to an average of one site per square mile (640 acres) within the DDCT, subject to valid existing rights and applicable law. The one location and cumulative value of existing disturbances will not exceed 5 percent of suitable habitat of the DDCT area using the DDCT process. ● Inside Greater Sage-Grouse (priority habitat) core population areas and connectivity corridors, all suitable habitat disturbed (any program area) will not exceed 5% of suitable habitat within the DDCT area using the DDCT process. ○ Design and manage facilities to prevent WNV transmission. ○ New project noise levels, either individual or cumulative, should not exceed 10 dBA (as measured by L50) above baseline noise at the perimeter of the lek from 6:00 pm to 8:00 am during the breeding season (March 1- May 15). Specific noise protocols for measurement and implementation will be developed as additional research and information emerges. ○ Locate new Local or Collector roads (as defined in BLM Manual 9113) greater than 1.9 miles from the perimeter of occupied Greater Sage-Grouse leks. Locate new Resource roads greater than 0.6 mile from the perimeter of occupied Greater Sage-Grouse leks. ○ Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. ● Prohibit surface-disturbing and disruptive activities from March 15 to June 30 (independent of habitat suitability). Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case by case basis. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by up to 14 days prior to or subsequent to the above dates. ● Prohibit surface-disturbing and disruptive activities within mapped Greater Sage-Grouse winter concentration areas, from December 1 to March 14. Activities in unsuitable habitats within PHMAs would be evaluated under the exception and modification criteria and could be allowed on a case-by-case basis. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by up to 14 days prior to or subsequent to the above dates.

Record #	Goal/Obj.	Decision
		To the extent necessary to prevent unnecessary or undue degradation, manage as follows within Greater Sage-Grouse Core Population Connectivity Corridors: ● Prohibit surface occupancy and disturbing activities, within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). ● In Greater Sage-Grouse Core Population Connectivity Corridors, subject to valid existing rights and applicable law, the cumulative value of existing disturbances will not exceed 5% of suitable habitat of the DDCT area using the DDCT process. Inside Greater Sage-Grouse (priority habitat) core population areas and connectivity corridors, all suitable habitat disturbed (any program area) will not exceed 5% of suitable habitat within the DDCT area using the DDCT process. ○ Design and manage facilities to prevent WNV transmission. ○ Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. ● Prohibit surface-disturbing and disruptive activities within 4.0 miles of occupied Greater Sage-Grouse leks from March 15 to June 30 (independent of habitat suitability and restricted to within Population Connectivity Areas). Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case by case basis. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by up to 14 days prior to or subsequent to the above dates. ● Prohibit surface-disturbing and disruptive activities within mapped Greater Sage-Grouse winter concentration areas, from December 1 to March 14. Activities in unsuitable habitats within PHMAs would be evaluated under the exception and modification criteria and could be allowed on a case-by-case basis. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by up to 14 days prior to or subsequent to the above dates.

Record #	Goal/Obj.	Decision
		Manage as follows within occupied Greater Sage-Grouse habitat outside of Core Population and Core Population Connectivity Corridors: • Prohibit or restrict surface occupancy and disturbing activities within 0.25 mile of the perimeter of occupied Greater Sage-Grouse leks. • Reduce surface disturbance for authorizations within 0.25 mile of occupied Greater Sage-Grouse leks by: ◦ Design and manage facilities to prevent WNV transmission. • Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. Recommend for all surface-disturbing activities on BLM surface adjacent to core or connectivity population areas, within or adjacent to lands involved in Greater Sage-Grouse conservation projects. BLM parcels less than 640 acres that only meet the population density factor may be excluded. • Prohibit surface-disturbing and/or disruptive activities within 2.0 miles of occupied Greater Sage-Grouse leks, from March 15 to June 30 (independent of habitat suitability). Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case by case basis. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by up to 14 days prior to or subsequent to the above dates. • Protect mapped winter concentration areas, from December 1 to March 14, in GHMA would be implemented only where winter concentration areas are identified as supporting biologically significant numbers of Greater Sage-Grouse nesting in PHMA and/or attending leks within PHMA (core only). Appropriate seasonal timing restrictions and habitat protection measures would be considered and evaluated in consultation with the WGFD in all identified winter concentration areas. Where credible data support different timeframes for this seasonal restriction, dates may be expanded by up to 14 days prior to or subsequent to the above dates. Note (PHMA and GHMA): The authorized officer may grant an exception if an environmental record of review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavioral needs of Greater Sage-Grouse.

Table 2.8. 1000 PHYSICAL RESOURCES (PR) – SOIL

Objectives:		
PR:2.1 Achieve and maintain Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming (Appendix I (p. 419)).		
PR:2.3 Rehabilitate all surface-disturbing activities consistent with applicable laws, regulations, and policies.		
Record #	Goal/Obj.	Decisions
Soil-1002	PR:2.1 PR:2.2 PR:2.3	Authorized surface-disturbing activities will include plans for reclamation; site-specific reclamation actions should reflect the complexity of the project, environmental concerns, and the reclamation potential of the site.

Table 2.9. 1000 PHYSICAL RESOURCES (PR) – WATER

GOAL PR:3 Watershed, surface water, and groundwater resources are consistent with applicable state and federal standards and regulations.		
Objective:		
PR:3.1 BLM actions maintain or improve watershed, wetland, and riparian functions to support desired surface-flow regimes and water quality.		
Record #	Goal/Obj.	Decisions
Water-1007	PR:3.1 PR:3.2 PR:3.4	Design and manage land use and surface-disturbing activities to reduce channel and bank erosion and the associated loss of riparian habitats.
Water-1013	PR:3.1 PR:3.2	Allow surface disturbance within 500 feet of springs, non-CBNG reservoirs, water wells, or perennial streams with an approved site-specific plan that ensures construction, stabilization and reclamation methods are meeting water and other resource objectives including, but not limited to soil, slope, and vegetation, and wildlife habitat.
Water-1016	PR:3.1 PR:3.3 PR:3.5	Evaluate unneeded reservoirs for removal and reclamation.

Table 2.10. 2000 MINERAL RESOURCES (MR) – LOCATABLE MINERALS

Objective:
MR:1.1 Provide opportunities for the exploration and development of locatable minerals, as well as mill and tunnel site operations, while avoiding or mitigating the effects of these activities on other resource values so that unnecessary or undue degradation is prevented.

Table 2.11. 2000 MINERAL RESOURCES (MR) – LEASABLE – COAL

Objective:		
MR:2.1 Maintain coal leasing and exploration, while minimizing impacts to other resource values.		
Record #	Goal/Obj.	Decisions
Coal-2001	MR:2.1 MR:2.2	Coal planning was completed as part of the April 2001 BFO RMP update. At that time the four coal planning screens (i.e., coal development potential, unsuitability, multiple use and surface owner consultation) were applied to certain federal coal lands within the BFO planning area. The result of this planning effort was a decision identifying lands acceptable for further coal leasing consideration. The coal management decisions made in the BFO RMP update will be carried forward in this Approved RMP. Federal coal lands identified acceptable for further coal leasing consideration are available for Lease By Applications, lease modifications, emergency leases, and exchanges. Prior to offering a coal tract for sale, the need to reapply the unsuitability criteria will be reviewed, a tract specific NEPA analysis will be completed, and there will be opportunity for public comment. At the time an application for a new coal lease or lease modification is submitted to the BLM, the BLM will determine whether the lease application area is "unsuitable" for all or certain coal mining methods pursuant to 43 CFR 3461.5. Priority habitat (core population areas and core population connectivity corridors) is essential habitat for maintaining Greater Sage-Grouse for purposes of the suitability criteria set forth at 43 CFR 3461.5(o)(1).

Table 2.12. 2000 MINERAL RESOURCES (MR) – LEASABLE – FLUID (Oil/Gas and Geothermal)

Objective:		
MR:3.4 Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside of Greater Sage-Grouse habitat. When analyzing leasing and authorizing development of fluid mineral resources, including geothermal, in priority habitat (core population areas and core population connectivity corridors) and general habitat, and subject to applicable stipulations for the conservation of Greater Sage-Grouse, priority will be given to development in non-habitat areas first and then in the least suitable habitat for Greater Sage-Grouse. The implementation of these priorities will be subject to valid existing rights and any applicable law or regulation, including, but not limited to, 30 U.S.C. 226(p) and 43 CFR 3162.3-1(h). Where a proposed fluid mineral development project on an existing lease could adversely affect Greater Sage-Grouse populations or habitat, the BLM will work with the lessees, operators, or other project proponents to avoid, reduce and mitigate adverse impacts to the extent compatible with lessees' rights to drill and produce fluid mineral resources. The BLM will work with the lessee, operator, or project proponent in developing an APD for the lease to avoid and minimize impacts to Greater Sage-Grouse or its habitat and will ensure that the best information about the Greater Sage-Grouse and its habitat informs and helps to guide development of such federal leases.		
Record #	Goal/Obj.	Decisions
O&G-2001	MR:3.1	Continue to require lessees to conduct operations in a manner that minimizes adverse impacts to other resources and other land uses and users. Where the federal government owns the mineral estate in Greater Sage-Grouse habitat and the surface is in non-federal ownership, apply to BLM authorizations regulating the federal lessee the same stipulations, COAs, and/or conservation measures and RDFs applied if the mineral estate is developed on BLM-administered surface lands in that management area, to the maximum extent permissible under existing authorities, and in coordination with the landowner. Where the federal government owns the surface and the mineral estate is in non-federal ownership in Greater Sage-Grouse habitat, apply appropriate surface use COAs, stipulations, and mineral RDFs through ROW grants or other surface management instruments, to the maximum extent permissible under existing authorities, in coordination with the mineral estate owner/lessee.
O&G-2006	MR:3.3	Areas that are open to oil and gas leasing are open to geophysical exploration subject to appropriate mitigation developed through use of the mitigation guidelines described in Appendix F (p. 397). Areas closed to oil and gas leasing are closed to geophysical exploration. Geophysical exploration is subject to motorized travel limitations and restrictions on surface-disturbing and disruptive activities. Geophysical exploration projects that are designed to minimize habitat fragmentation within PHMA would be allowed, except where prohibited or restricted by LUP decisions, and in conformance with timing and distances Management Decisions (see SS WL-4024).

Table 2.13. 2000 MINERAL RESOURCES (MR) – LEASABLES – OTHER LEASABLE MINERALS

GOAL MR:4 Manage leasable minerals other than oil, gas, coal, and geothermal energybased on demand, while avoiding or mitigating impacts to other resource values.		
Objective:		
MR:4.1 Make opportunities available for exploration and development of leasable minerals other than oil, gas, coal, and geothermal energy, while avoiding or mitigating impacts of these activities on other resource values.		
Record #	Goal/Obj.	Decisions
OL-2001	MR:4.1	All lands in the planning area are available to exploration and development of other leasable minerals unless closed to mineral leasing. All non-energy leasable mineral activities would be considered in PHMA, provided that the activities can be completed in compliance with all Greater Sage-Grouse occupancy, timing, density and disturbance restrictions (see SS WL-4024).

Table 2.14. 2000 MINERAL RESOURCES (MR) – SALABLE MINERALS**Objective:**

MR:5.1 Provide opportunities for exploration and development of salable minerals while avoiding or mitigating effects to other resource values.

Table 2.15. 3000 FIRE AND FUELS MANAGEMENT (FM)

GOAL FM:1 Life, property, and resource values are protected. The protection of human life is the single, overriding priority. Setting priorities among protecting human communities and community infrastructure, other property and improvements, and natural and cultural resources will be done based on the values to be protected, human health and safety, and the costs of protection. Objectives: FM:1.1 Respond to unplanned wildfires based on: (1) ecological, (2) social, and (3) legal consequences while supporting other resource values. FM:1.5 Implement appropriate emergency stabilization and rehabilitation actions following wildland fire. GOAL FM:2 Plant community and hazardous fuel objectives are achieved. Objective: FM:2.1 Improve fire regime condition class and maintain or improve conditions of fire-adapted landscapes by managing fire, planned and unplanned, to accomplish beneficial resource objectives.		
Record #	Goal/Obj.	Decisions
Fire-3001	FM:1.1	A Fire Management Plan for the Wyoming High Plains District will be maintained that more specifically outlines management response and implementation actions for wildland fire response of public lands.
Fire-3002	FM:1.1	A resource advisor appropriate to the potentially affected resource will be consulted, or assigned, to all wildland fires that involve or threaten BLM-administered lands.
Fire-3006	FM:1.5	Implement the BLM Emergency Stabilization and Burned Area Rehabilitation standards located in the DOI Interagency Burned Area Emergency Response Guidebook (DOI 2004) and BLM Burned Area Emergency Stabilization and Rehabilitation Handbook (BLM 2007a) as needed. Appendix P (p. 625) provides additional information regarding the BLM's approach to emergency stabilization and rehabilitation.
Fire-3007	FM:2.1	Use the District Fire Management Plan to implement the objectives of this RMP; to address fire management on a landscape scale, to maintain or improve conditions in fire-adapted landscapes, and to accomplish resource management objectives.

Record #	Goal/Obj.	Decisions
Fire-3008	FM:2.2	Ensure all prescribed burning activities comply with Wyoming DEQ air quality standards and smoke management rules. For fuels management, the BLM would consider multiple tools for fuels reduction and would analyze in NEPA compliance documentation before electing to implement prescribed fire in PHMAs. If prescribed fire is used in Greater Sage-Grouse habitat, the NEPA analysis for the Burn Plan will address: • why alternative techniques were not selected as a viable options; • how Greater Sage-Grouse goals and objectives would be met by its use; • how the Conservation Objectives Team Report objectives would be addressed and met; • a risk assessment to address how potential threats to Greater Sage-Grouse habitat would be minimized. Prescribed fire as a vegetation or fuels treatment shall only be considered after the NEPA analysis for the Burn Plan has addressed the four bullets outlined above. Prescribed fire could be used to meet specific fuels objectives that would protect Greater Sage-Grouse habitat (e.g., creation of fuel breaks that would disrupt the fuel continuity across the landscape in stands where annual invasive grasses are a minor component in the understory, burning slash piles from conifer reduction treatments, used as a component with other treatment methods to combat annual grasses and restore native plant communities). Prescribed fire in known Greater Sage-Grouse winter range shall only be considered after the NEPA analysis for the Burn Plan has addressed the four bullets outlined above. Any prescribed fire in winter habitat would need to be designed to strategically reduce wildfire risk around and/or in the winter range and designed to protect winter range habitat quality.
Fire-3011	FM:1.1 FM:1.2	Response to wildfire varies from full protection in areas where fire is undesirable to monitoring fire behavior in areas where fire can be managed to accomplish other resource objectives. The entire planning area is available to manage wildfire for multiple objectives.
Fire-3012	FM:1.1 FM:1.2	Prohibit heavy equipment use within the following areas, except when human safety is at risk or if the expected fire effects would cause more resource damage than the use of heavy equipment: • Areas of cultural resource sensitivity • Riparian/wetland habitats • Identified Greater Sage-Grouse important habitats: Core Population Areas, nesting, brood-rearing, Core Population Connectivity Corridors, or winter habitat • Areas of highly erosive soils • Lands with wilderness characteristics Limit heavy equipment usage to existing roads and trails, or immediately adjacent to them, in areas not identified as full protection.

Record #	Goal/Obj.	Decisions
Fire-3013	FM:1.1 FM:1.2	Use protection strategies in the following areas: • WUI • Wildland Industrial Interface • Developed recreation • Developed electronic/communication sites of all types • Where sensitive or high value resources would be adversely affected by fire (i.e., Greater Sage-Grouse Core Population Area and Connectivity Corridor)
Fire-3014	FM:1.5	Evaluate all fires and rehabilitate fire-damaged lands as needed to meet resource objectives. Repair suppression damages as necessary. Post ES&R and BAER management would be designed to ensure long-term persistence of seeded or pre-burn native plants. This may require temporary or long-term changes in livestock grazing, wild horse, and travel management, etc., to achieve and maintain the desired condition of ES&R and BAER projects to benefit Greater Sage-Grouse (Eiswerth and Shonkwiler 2006). The BLM could bring in BAR and BAER teams who would work collaboratively with partners at the federal, state, and local level to rehabilitate and restore Greater Sage-Grouse habitats in a manner consistent with the core habitat population area strategy for conservation. DDCT reviews would be conducted in coordination with the WGFD Habitat Protection Program located in Cheyenne, Wyoming at the WGFD headquarters. Areas within PHMAs would be high priority for restoration of Greater Sage-Grouse habitat beyond immediate response.
Fire-3015	FM:1.6	Use wildland fire and other vegetation treatments to meet desired management objectives.

Table 2.16. 4000 BIOLOGICAL RESOURCES (BR) – VEGETATION

GOAL BR:1 Vegetation resources sustained in desired ecological conditions.

Objectives:

BR:1.1 Manage communities for a diversity of native species, habitats, seral stages, and distribution.

BR:1.2 Manage for healthy vegetation communities to ensure their capability to provide sufficient plant composition, cover, and litter accumulation to protect soils from wind and water erosion and enhance nutrient cycling and productivity.

BR:1.3 Reclaim areas affected by surface-disturbing activities to promote healthy functioning native plant communities.

BR:1.4 Manage habitat to facilitate the conservation, recovery, and maintenance of populations of native, desirable non-native, and special status plant species consistent with appropriate local, state, and federal conservation requirements and management plans.

BR:1.5 Manage for healthy native plant communities by reducing and managing invasive, non-native noxious species.

Table 2.17. 4000 BIOLOGICAL RESOURCES (BR) – VEGETATION – FORESTS AND WOODLANDS

Record #	Goal/Obj.	Decisions
Forest-4006	BR:2.1	Actively manage woodlands to prevent expansion into other communities consistent with multiple resource values, on a project-specific basis.

Table 2.18. 4000 BIOLOGICAL RESOURCES (BR) – VEGETATION – GRASSLAND AND SHRUBLAND COMMUNITIES

GOAL BR:3 A diverse landscape of native grasslands and shrublands sustained in desired ecological conditions.		
Objective:		
BR:3.1 Manage for a full range of sagebrush, shrub, and grassland communities with diverse native species and subspecies, composition, canopies, densities, and age classes across the landscape.		
Record #	Goal/Obj.	Decisions
GS-4001	BR:3.1	Manage vegetative communities in accordance with Wyoming Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming.
GS-4003	BR:3.1	Use an integrated management approach (e.g., mechanical, chemical, biological treatments, prescribed fire, and grazing management techniques) to maintain, restore, and enhance the health and diversity of plant communities to achieve resource or multi-resource objectives.
GS-4005	BR:3.1	Manage grasslands and shrublands to protect, preserve, or enhance plant communities.
GS-4006	BR:3.1	Manage the siting of facilities and related infrastructure (utility corridors, roads) to reduce impacts to vegetation resources.
GS-4007	BR:3.1	Manage the planning and development of travel routes, recreational uses, mineral exploration and development sites, and ROW to reduce impacts to the vegetation resource.
GS-4008	BR:3.1	Develop a contingency plan addressing catastrophic natural events such as drought, wildfires, and large-scale pest infestations, incorporating strategies that best protect vegetation resources.
GS-4009	BR:3.1	Work with landowners on split estate lands to reestablish disturbed sites to healthy plant communities in accordance with the ecological site potential.

Table 2.19. 4000 BIOLOGICAL RESOURCES (BR) – VEGETATION – RIPARIAN/WETLAND RESOURCES

GOAL BR:4 Health and functional capabilities in riparian/wetland systems.		
Objectives:		
BR:4.1 Manage lotic and lentic wetland/riparian systems at a minimum to achieve and/or maintain PFC.		
BR:4.2 Improve riparian systems and wetlands in systems operating at less than PFC.		
BR:4.3 Manage contributing watersheds to sustain riparian health and water quality.		
BR:4.4 Manage and enhance riparian and wetland systems for plant, insect, fish and wildlife species that depend on these systems for their health and well being.		
BR:4.5 CBNG created riparian and wetland systems will be evaluated, retained, or reclaimed to support vegetation and other resource values.		
Record #	Goal/Obj.	Decisions
Riparian-4002	BR:4.1 BR:4.2 BR:4.4	Prioritize, and develop activity and implementation plans to manage riparian systems to be at or above, or continue to be improving toward, PFC while achieving the Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming.
Riparian-4003	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	Manage riparian and wetland systems to enhance forage conditions and improve water quality. Manage all riparian systems with sensitive species concerns to a succession stage appropriate for that system, including vertical as well as horizontal vegetative structure and composition.
Riparian-4004	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	Expand and enhance riparian/wetland systems and habitat in cooperation with stakeholders.
Riparian-4005	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	Prevent degradation, loss, or destruction of riparian/wetland habitat.
Riparian-4008	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	Allow surface-disturbing activities within 500 feet of riparian/wetlands systems with an approved site-specific plan that ensures construction, stabilization, and reclamation methods are meeting resource objectives, including, but not limited to soil, vegetation and wildlife habitat.
Riparian-4010	BR:4.1 BR:4.3 BR:4.4	Identify and manage systems capable of achieving DFC.
Riparian-4011	BR:4.5	Restore vegetation in CBNG supported wetland and riparian systems on BLM surface and/or lease in accordance with the ecological site potential.

Table 2.20. 4000 BIOLOGICAL RESOURCES (BR) – INVASIVE SPECIES AND PEST MANAGEMENT

GOAL BR:5 Healthy native communities with manageable levels of pathogens, undesirable, invasive, non-native, or noxious species.		
Objectives:		
BR:5.1 Develop and maintain baseline information regarding the extent, location, and potential impact(s) of pest species. From this baseline information develop and implement an Integrated Pest Management Plan. Integrated management would be used to control, suppress, and eradicate, where possible, noxious and invasive species per BLM Handbook H-1740-2. Manage noxious or invasive species treatments to maintain or improve Greater Sage-Grouse habitat. Apply Required Design Features as Conditions of Approval, such as those in Appendix C (p. 285). Encourage the use of voluntary BMPs.		
BR:5.2 Facilitate support for an integrated approach for the detection, management, or eradication of new and minor infestations.		
BR:5.3 Develop, implement, and maintain a management program for annual bromes and other invasive or undesirable species not listed as noxious, utilizing the best available science and BMPs.		
BR:5.4 Coordinate with APHIS to facilitate pest and predator management.		
Record #	Goal/Obj.	Decisions
Pest-4002	BR:5.1 BR:5.2 BR:5.3 BR:5.4	Manage designated pests on public surface lands using an Integrated Pest Management Approach consistent with DOI Manual 517 (BLM 2007b).
Pest-4003	BR:5.1 BR:5.2 BR:5.3 BR:5.4	Limit surface disturbance to the minimum needed for safe project completion to limit the spread of noxious weeds.
Pest-4004	BR:5.1 BR:5.2 BR:5.3	Use certified noxious weed seed-free products on all BLM-administered projects and lands.
Pest-4005	BR:5.1 BR:5.2 BR:5.3	Implement and maintain cooperative integrated pest management programs with county weed and pest districts, state agencies, private industry, grazing lessees, and other stakeholders in conjunction with BLM weed and pest control work on public lands adjoining deeded and state lands.
Pest-4006	BR:5.2	Require surface or vegetation disturbance areas, including areas formerly receiving or holding water, be treated for invasive species and revegetated.
Pest-4009	BR:5.1 BR:5.2 BR:5.3	Treat those plants on the State of Wyoming Designated list, the appropriate county lists, and other species of concern as determined by BLM resource specialists. Note: Priority treatments are those areas where infestations on private land are threatening public lands. Treat areas that contain annual bromes and/or other invasive species to minimize competition and favor establishment of desired species.
Pest-4010	BR:5.3	Designate and prioritize areas for the treatment of annual brome species.

Table 2.21. 4000 BIOLOGICAL RESOURCES (BR) – FISH & WILDLIFE RESOURCES

GOAL BR:6 Distribution and abundance of all native and desirable non-native species are optimized. Objectives: BR:6.1 BLM actions prevent and/or reduce impacts to desirable species. BR:6.2 In coordination with cooperating agencies, develop and implement an achievable Wildlife Monitoring and Protection Plan. BR:6.3 Maintain, restore, or improve the continuity and productivity of fish and wildlife habitats to support WGFD population objectives. BR:6.4 Develop and implement an adaptive conservation and management strategy. GOAL BR:7 Sufficient functional habitat for native and desirable non-native species. Objectives: BR:7.1 Evaluate, update, and revise as necessary existing Wildlife Habitat Management Plans. BR:7.2 Develop Wildlife Habitat Management Plans for areas with important habitats. BR:7.3 Manage habitat consistent with local, state, and federal management plans, as applicable. BR:7.4 Continue to gather habitat and population data while concurrently monitoring human and natural disturbance dynamics to improve habitat management. BR:7.5 Provide security habitat, sufficient in amount and distribution, to support WGFD population objectives for fish and wildlife to escape from disruptive activities. BR:7.6 Maintain and provide functioning sagebrush habitat to sustain sagebrush obligates and other sagebrush dependent species.
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GOAL BR:8 Fish and wildlife are able to move between areas of functionally intact habitat.		
Objectives:		
BR:8.1 Develop Travel Management Plans for areas important for fish and wildlife while supporting other resource values.		
BR:8.2 Develop a ROW Management Plan for utility corridors to manage impacts to areas of habitat important to fish and wildlife consistent with other resource values.		
BR:8.3 Land acquisitions should support desirable fish and wildlife populations or habitat.		
BR:8.4 Restore functionality to areas of degraded habitat important to fish and wildlife populations consistent with other resource values.		
Record #	Goal/Obj.	Decisions
Fish		
Fish-4008	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	Maintain or enhance streams and riparian areas associated with Class I and II streams (WGFD classifications), Powder River, Tongue River, and other appropriate areas for desired fisheries potential.
Fish-4012	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:9.1	Allow surface-disturbing activities within 0.25 mile of naturally occurring water bodies containing native and desirable non-native fish species where fish resource objectives can be met.
Wildlife		
WL-4001	BR:7.3 BR:7.4 BR:7.5 BR:8.1 BR:8.2 BR:8.4	Develop appropriate mitigation for surface-disturbing and disruptive activities associated with wildlife habitat management through use of the mitigation guidelines described in Appendix F (p. 397).
WL-4002	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.3 BR:8.4	Maintain or improve important wildlife habitats through vegetative manipulations, habitat improvement projects, livestock grazing strategies and the application of The Wyoming Guidelines for Managing Sagebrush Communities with Emphasis on Fire Management (Wyoming Interagency Vegetation Committee 2002) and Appendix F (p. 397), WGFD Strategic Habitat Plan (WGFD 2001), State Wildlife Action Plan (WGFD 2010), and similar guidance updated over time.
WL-4003	BR:7.1	Continue to use existing Habitat Management Plans and update as necessary to include management objectives and prescriptions for wildlife: South Big Horns Habitat Management Plan (BLM 1986b), including a portion or all of the Gardner Mountain and North Fork WSAs; Wetlands Habitat Management Plan (BLM 1986a); and Middle Fork Powder River Habitat Management Plan (BLM 1980).

Record #	Goal/Obj.	Decisions
WL-4005	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.4 BR:9.1 BR:9.2	Consult with the WGFD and USFWS, in accordance with MOUs, when applying mitigation for wildlife and before waiving, allowing exceptions to, or modifying wildlife-related land use restrictions and mitigation.
WL-4006	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2	Provide, to the extent possible, suitable habitat and forage to support wildlife population objectives as defined by WGFD. BLM will cooperatively consider proposals by the WGFD to change population objective levels based on habitat capability and availability.
WL-4007	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2	Manage access to protect crucial habitats in cooperation with WGFD and other stakeholders.
WL-4008	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2 BR:9.4	Utilize current research, management and conservation plans, and similar related documents to guide wildlife habitat management.

Record #	Goal/Obj.	Decisions
WL-4009	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2 BR:9.4	Construct new fences to avoid adverse impacts to wildlife and in accordance with BLM Fencing Handbook 1741-1 (BLM 1989) and WO Instruction Memorandum 2010-022: Managing Structures for the Safety of Sage-grouse, Sharp-tailed grouse, and Lesser prairie chicken (BLM 2009b).
WL-4012	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2 BR:9.4	Inventory, record, and report existing type, condition, and location of BLM fences. Prioritize fence projects and annually implement modifications in accordance with appropriate wildlife needs and the BLM Fencing Handbook 1741-1.
WL-4013	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:9.1 BR:9.4	Allow surface-disturbing and disruptive activities to occur throughout the entire life of projects during seasons important for wildlife when wildlife resource objectives can be met.
WL-4014	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.2 BR:9.1	Powerlines (distribution and transmission) will be designed to minimize wildlife related impacts and constructed to the latest APLIC guidance. Prohibit above ground distribution powerlines unless identified in an approved distribution plan.

Table 2.22. 5000 HERITAGE AND VISUAL RESOURCES (HR) – CULTURAL RESOURCES

Record #	Goal/Obj.	Decisions
Cultural-5007	HR:3.1 HR:4.1	Prohibit surface disturbance within the following sites: ● Pumpkin Buttes ● Cantonment Reno ● Dull Knife Battle ● Crazy Woman Battle ● Contributing and Unevaluated Segments of the Bozeman Trail ● All Rock Art Sites ● All Rock Shelter Sites ● All Native American Burials Allow surface disturbance and infrastructure within 3.0 miles of the following sites where development is either not visible, or will result in a weak contrast to the setting: ● Pumpkin Buttes ● Cantonment Reno ● Dull Knife Battle ● Crazy Woman Battle ● Contributing and Unevaluated Segments of the Bozeman Trail ● All Rock Art Sites ● All Native American Burials

Table 2.23. 5000 HERITAGE AND VISUAL RESOURCES (HR) – PALEONTOLOGICAL RESOURCES

Record #	Goal/Obj.	Decisions
Paleo-5001	HR:6.1 HR:6.2	Retain public lands with significant paleontological values.
Paleo-5006	HR:6.1 HR:6.2	Avoid areas containing paleontological resources of high quality or importance when developing locatable minerals.
Paleo-5007	HR:6.1 HR:6.2	Apply an NSO stipulation to mineral leases in areas containing paleontological resources of high quality or importance.
Paleo-5008	HR:6.1 HR:6.2	Avoid areas containing paleontological resources of high quality or importance when developing salable minerals.

Table 2.24. 5000 HERITAGE AND VISUAL RESOURCES (HR) – VISUAL RESOURCES

Record #	Goal/Obj.	Decisions
VRM-5002	HR:8.2	Incorporate BMPs for visual resources into project planning for federal actions.

Table 2.25. 6000 LAND RESOURCES (LR) – LANDS AND REALTY

GOAL LR:2 Manage land tenure adjustments and land use authorizations to meet the needs of the customers while protecting other resource values.		
Objectives:		
LR:2.1 Develop and maintain a land-ownership pattern that improves access for public use, and improves management and protection of BLM-administered lands by:		
1. Acquiring legal easements to BLM-administered lands for recreational opportunities and administrative use. 2. Responding to requests for land authorizations for access needs. 3. Responding to requests for land transfers. 4. Giving priority to land exchanges and/or sales on custodial grazing allotments while supporting other resource values.		
LR:2.3 Effects of infrastructure projects, including siting, will be minimized using the best available science, updated as monitoring information on current infrastructure projects becomes available.		
Record #	Goal/Obj.	Decisions
L&R-6002	LR:2.1	Consider land use authorizations (permits, leases, etc.) on a project-specific basis consistent with other resource objectives.
L&R-6003	LR:2.1	Consider withdrawals for surface and/or minerals on a project-specific basis.
L&R-6011	LR:2.1	Acquire private or state land or interest in land from willing sellers consistent with other resource objectives, on a project-specific basis.
L&R-6012	LR:2.1	Acquire and dispose of land based on all resource values, including but not limited to agricultural potential and water. Do not classify, open, or make available any BLM-administered public lands within the planning area for agricultural leasing or agricultural entry under either Desert Land Entry or Indian Allotment for one or more of the following reasons: rugged topography, presence of sensitive resources, lack of water or access, small parcel size, and/or unsuitable soils. Lands classified as PHMA and GHMA for Greater Sage-Grouse will be retained in federal management unless: (1) the agency can demonstrate that disposal of the lands, <u>including land exchanges</u>, will provide a net conservation gain to the Greater Sage-Grouse or (2) the agency can demonstrate that the disposal, <u>including land exchanges</u>, of the lands will have no direct or indirect adverse impact on conservation of the Greater Sage-Grouse. Exceptions would be considered where there is mixed ownership and land exchanges would allow for additional or more contiguous federal ownership patterns within PHMA. For PHMA with minority federal ownership, an additional, effective mitigation agreement would be included for any disposal of federal land. As a final preservation measure, consideration should be given to pursuing a permanent conservation easement. For lands in GHMA that are identified for disposal, the BLM will only dispose of such lands consistent with the goals and objectives of this plan, including, but not limited to, the land use plan goal to conserve, recover, and enhance Greater Sage-Grouse habitat on a landscape scale.
L&R-6014	LR:2.2	Prioritize acquiring land or interests in lands in areas adjacent to large blocks of BLM-administered land or other lands having significant resource or other values before other areas.

Table 2.26. 6000 LAND RESOURCES (LR) – RIGHTS-OF-WAY AND CORRIDORS

GOAL LR:4 Primary infrastructure corridors and subsidiary routes consistent with other resource values.		
Objectives:		
LR:4.1 Manage public lands to meet the needs of ROW customers while supporting other resource values.		
LR:4.3 Identify infrastructure corridors consistent with other resource values.		
LR:4.4 Make opportunities available for exploration and development of CO ₂ sequestration research and activities, while avoiding or mitigating impacts of these activities on other resource values.		
LR:4.5 Effects of infrastructure projects, including siting, will be minimized using the best available science, updated as monitoring information on current infrastructure projects becomes available.		
Record #	Goal/Obj.	Decisions
ROW-6001	LR:4.3 LR:4.5	Designate corridors for major ROW to minimize surface disturbance and impacts to other resources.
ROW-6004	LR:4.3 LR:4.5	The preferred location for new ROW will be in or adjacent to existing disturbed areas associated with existing ROW, constructed roads, or highways.
ROW-6005	LR:4.2	Maintain a transportation management system in cooperation with appropriate state and local agencies to meet public and resource management needs.
ROW-6006	LR:4.1 LR:4.5	Make lands available for ROW in accordance with management identified within the Approved RMP to conserve other resources. This results in: • 79,777 acres excluded from ROW. • 321,149 acres identified for ROW avoidance. PHMA would be managed as ROW avoidance areas for new ROW or SUA permits. Within PHMA where new ROWs/SUAs are necessary, new ROWs/SUAs would be located within designated RMP corridors or adjacent to existing ROWs/SUAs where technically feasible. Subject to valid existing rights including non-federal land inholdings, required new ROWs/SUAs would be located adjacent to existing ROWs/SUAs or where it best minimizes Greater Sage-Grouse impacts. Greater Sage-Grouse priority habitat (Core Population Areas and Core Population Connectivity Corridors) are designated as avoidance areas for ROWs. • 381,176 acres are open for ROW development.

Record #	Goal/Obj.	Decisions
ROW-6009	LR:4.1 LR:4.5	Designate the following corridors for major ROW transportation and utility use, in cooperation with the State of Wyoming: • Echeta Road • Sheridan to Gillette, largely following US 14/16 • Highway 59 north of Gillette • Interstate 25 • Interstate 90, Gillette to Montana State Line • Powder River • Powder River Breaks (Buffalo to Gillette) Corridor use is required. No above ground lines will be authorized in the Powder River or Powder River Breaks corridors. Corridor requirements within Greater Sage-Grouse habitat are identified in SS WL-4022.
ROW-6010	LR:4.1 LR:4.5	Authorize and place above ground facilities (i.e., compressors, electric distribution powerlines) within ROW and other disturbance areas when resource objectives can be met.
ROW-6012	LR:4.4	Evaluate CO ₂ sequestration proposals where in accordance with management identified within the Approved RMP.

Table 2.27. 6000 LAND RESOURCES (LR) – TRAVEL AND TRANSPORTATION MANAGEMENT

GOAL LR:5 A safe transportation network that supports other resource values.		
Objectives:		
LR:5.1 Utilize a comprehensive travel management approach to sustain and enhance access, recreational experiences, and support other resource values.		
LR:5.3 Designate all BLM-administered lands as Open, Limited, or Closed to OHV use, in consideration of other resource values.		
LR:5.4 Provide for acceptable modes of legal public access that supports other resources, reduces conflicts, and provides for diverse recreation opportunities.		
Record #	Goal/Obj.	Decisions
Trans-6002	LR:5.1 LR:5.4	Evaluate roads constructed under other initiatives (e.g., oil and gas exploration) for inclusion in the BLM transportation system. Roads that are no longer needed for their original purposes are assessed for addition to the BLM transportation system prior to reclamation.
Trans-6004	LR:5.1	Design, construct, and maintain roads or trails based on the specific objectives for that trail or road in consideration of other resources. Design, construct, and maintain roads to minimize surface disturbance, changes to surface water runoff, and erosion.
Trans-6006	LR:5.1 LR:5.4	Base road or trail closures and abandonments on resource protection, demand for new roads, and accommodation of authorized uses.
Trans-6007	LR:5.4 LR:6.1 LR:6.2 LR:6.3	Maintain transportation system roads under BLM jurisdiction in accordance with assigned maintenance levels and in consideration of other resource values. Maintain administrative roads on an as needed basis, dependent on time, funding, and access priorities.
Trans-6008	LR:5.2	Within 5 years of the ROD, inventory all routes on public land and develop a travel management plan to classify and designate routes for continued use or decommissioning and reclamation. Include maintenance standards for routes to be retained for public use, as well as specific measures to accomplish road closure in the travel management plan. Inventory, designate, number, and sign all routes as appropriate. Posted signs will include allowed uses and activities. Restrictions to existing roads and trails remains in effect until travel management planning is completed and designated routes are identified. Appendix S (p. 667) provides additional information regarding the travel management planning process.

Record #	Goal/Obj.	Decisions
Trans-6013	LR:5.1 LR:5.3	Allow temporary closures to motorized vehicle use in areas that pose public health and safety risks, and/or where resource damage is imminent. In Greater Sage-Grouse priority habitat (Core Population Areas and Core Population Connectivity Corridors) and general habitat, temporary closures will be considered in accordance with 43 CFR subpart 8364 (Closures and Restrictions); 43 CFR subpart 8351 (Designated National Area); 43 CFR subpart 6302 (Use of Wilderness Areas, Prohibited Acts, and Penalties); 43 CFR subpart 8341 (Conditions of Use). Temporary closure or restriction orders under these authorities are enacted at the discretion of the authorized officer to resolve management conflicts and protect persons, property, and public lands and resources. Where an authorized officer determines that OHVs are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources, the affected areas shall be immediately closed to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence (43 CFR 8341.2). A closure or restriction order should be considered only after other management strategies and alternatives have been explored. The duration of temporary closure or restriction orders should be limited to 24 months or less; however, certain situations may require longer closures and/or iterative temporary closures. This may include closure of routes or areas.
Trans-6014	LR:5.3	Limit OHV use to designated routes unless compelling reasons exist to classify parcels as Open or Closed, and is consistent with other resource values. Until individual routes are designated, areas subject to route designation will be classified as Limited to existing routes. Once route designation is completed, areas will no longer be classified as Limited to existing routes.
Trans-6019	LR:6.2	Limit motorized vehicle use to designated routes within habitat of special status species consistent with travel management designations for that area. Routes will be designated to avoid occupied habitat during travel management planning.
Trans-6020	LR:5.1 LR:5.4	Evaluate existing routes in the vicinity of any new system roads for closure and reclamation consistent with other resource values.

Table 2.28. 6000 LAND RESOURCES (LR) – RECREATION

Objectives:		
LR:7.2 Manage recreation to protect resources, maintain public health and safety, and to provide a diverse array of benefits to the public.		
GOAL LR:8 Recreation facilities balance public demand with other resource values.		
Objective:		
LR:8.1 Design and maintain recreation sites to meet acceptable health and safety standards while supporting other resource values.		
Record #	Goal/Obj.	Decisions
Rec-6003	LR:7.2 LR:8.1 LR:9.1	Open the planning area to dispersed recreation where consistent with other resource values.
Rec-6010	LR:7.2	Avoid riparian habitat or develop and manage recreational sites, recreation facilities, and recreational access in a manner that minimizes impacts to riparian habitats.
Rec-6011	LR:7.2	Prohibit dispersed camping and commercial camps within 200 feet of perennial surface water.
Rec-6015	LR:7.3 LR:8.1	Allow additional recreation facilities in areas where they are supported by recreational use and are consistent with other resource values. Construction of recreation facilities within Greater Sage-Grouse PHMA (Core Population Areas and Core Population Connectivity Corridors) must conform with the avoidance and minimization measures of this plan. If it is determined that these conservation measures are inadequate for the conservation of Greater Sage-Grouse, the BLM will require and ensure compensatory mitigation that provides a net conservation gain to the species.
Rec-6018	LR:7.1	Designate the following areas as SRMAs and delineate discrete recreation management zone boundaries: ● Burnt Hollow (17,280 acres) ● Dry Creek Petrified Tree (2,567 acres) ● Hole-in-the-Wall (11,952 acres) ● Middle Fork Powder River (10,083 acres) ● Mosier Gulch (1,026 acres) ● Welch Ranch (1,748 acres) ● Weston Hills (9,504 acres) Strategically emphasize a variety of recreation opportunities along with the protection of natural and cultural resources. R&VS management will be recognized as the predominant land use focus in SRMAs. Manage SRMAs under site-specific management plans. Site-specific management plans will be consistent with and implement the provisions specified for SRMAs in Appendix T (p. 679).

Record #	Goal/Obj.	Decisions
Rec-6019	LR:7.1 LR:7.2 LR:8.1	Do not lease minerals within the boundary of the following SRMAs: ● Burnt Hollow (17,280 acres) ● Dry Creek Petrified Tree (2,567 acres) ● Hole-in-the-Wall (11,952 acres) ● Middle Fork Powder River (10,083 acres) ● Mosier Gulch (1,026 acres) ● Welch Ranch (1,748 acres) Lease fluid minerals with a CSU stipulation to be consistent with SRMA management in the following SRMA: ● Weston Hills (9,504 acres)
Rec-6021	LR:7.1 LR:7.2 LR:8.1	Allow surface disturbance within designated SRMAs for administrative use only, where consistent with other resource values.
Rec-6022	LR:7.1 LR:7.2 LR:8.1	Recommend withdrawals from mineral entry under the mining laws in designated SRMAs.
Rec-6023	LR:7.1 LR:7.2 LR:8.1	Allow salable mineral development within designated SRMAs for administrative use only.

Table 2.29. 6000 LAND RESOURCES (LR) – LIVESTOCK GRAZING MANAGEMENT

GOAL LR:11 Public rangelands provide for a sustainable level of livestock grazing consistent with other resource values and sustained yield.		
Objectives:		
LR:11.2 Manage forage to maintain or improve ecological states and achieve and/or maintain Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming.		
LR:11.3 Monitor and evaluate rangeland health and condition in coordination with cooperators, and lessees to determine if, and what additional management is needed to achieve desired ecological state.		
Record #	Goal/Obj.	Decisions
Grazing-6001	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.7 LR:11.8	Develop and implement appropriate livestock grazing management actions to achieve the Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming, to provide watershed protection, to improve forage for livestock, forage and habitat for wildlife, and enhance rangeland health.
Grazing-6004	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.8	Continue implementation of existing AMPs. Develop and implement new AMPs with grazing lessees and other stakeholders to achieve desired resource goals and objectives.
Grazing-6005	LR:11.1 LR:11.2 LR:11.3 LR:11.8	Manage livestock grazing to sustain riparian, wetland, mountain mahogany, specials status species or other special habitats.
Grazing-6009	LR:11.1 LR:11.2 LR:11.3 LR:11.7 LR:11.8	Implement strategies that best protect rangeland resources during periods of drought. Cooperate with stakeholders for voluntary adjustments in livestock use and/or livestock management.
Grazing-6015	LR:11.1 LR:11.2 LR:11.6	Develop range improvements in accordance with resource needs and livestock management.
Grazing-6016	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.8	Conduct baseline inventories. Develop, implement, and monitor AMPs. Base AMP goals/objectives in Category I and M allotments on resource protection and watershed health.

Record #	Goal/Obj.	Decisions
Grazing-6017	LR:11.1 LR:11.2 LR:11.3 LR:11.7	Allow livestock grazing on all public lands in the planning area except where an evaluation has determined it to be incompatible with other resource uses or values (campgrounds, entrances of caves, sites of cultural significance). • The BLM will prioritize (1) the review of grazing permits/leases, in particular to determine if modification is necessary prior to renewal, and (2) the processing of grazing permits/leases in Greater Sage-Grouse priority habitat (Core Population Areas and Core Population Connectivity Corridors) followed by general habitat. In setting workload priorities, precedence will be given to existing permits/leases in these areas not meeting Land Health Standards, with focus on those containing riparian areas, including wet meadows. The BLM may use other criteria for prioritization to respond to urgent natural resource concerns (e.g., fire) and legal obligations. • The BLM will collaborate with appropriate federal agencies and the State of Wyoming, as contemplated under the Wyoming Governor's Executive Order 2013-3, to: (1) develop appropriate conservation objectives; (2) define a framework for evaluating situations where Greater Sage-Grouse conservation objectives are not being achieved on federal land, to determine if a significant causal relationship exists between improper grazing (by wildlife or wild horses or livestock) and Greater Sage-Grouse conservation objectives; and (3) identify appropriate site-based actions to achieve Greater Sage-Grouse conservation objectives within the framework. Absent substantial and compelling information that adjustments are necessary to the core population area strategy, these core population areas, connectivity areas, identified and mapped winter concentration areas, and protective stipulations shall not be altered for a minimum of 7 years. Any changes shall involve a transparent process that provides an opportunity for public input and proper consideration of any proposal consistent with the provisions contemplated under Wyoming's core population area strategy. • The NEPA analysis for renewals and modifications of livestock grazing permits/leases that include lands within PHMAs will include specific management thresholds based on Greater Sage-Grouse Habitat Objectives Table and Land Health Standards (43 CFR 4180.2) and one or more defined responses that will allow the authorizing officer to make adjustments to livestock grazing that have already been subjected to NEPA analysis. • Allotments within priority habitat (Core Population Areas and Core Population Connectivity Corridors), and focusing on those containing riparian areas, including wet meadows, will be prioritized for field checks to help ensure compliance with the terms and conditions of the grazing permits. Field checks could include monitoring for actual use, utilization, and use supervision. • At the time a permittee or lessee voluntarily relinquishes a permit or lease, the BLM will consider whether the public lands where that permitted use was authorized should remain available for livestock grazing or be used for other resource management objectives, such as reserve common allotments or fuel breaks. This does not apply to or impact grazing preference transfers, which are addressed in 43 CFR 4110.2-3. 9,992 acres are incompatible with and 772,110 acres are available for livestock grazing. This does not apply to or impact grazing preference transfers, which are addressed in 43 CFR 4110.2-3.
Grazing-6019	LR:11.1 LR:11.3 LR:11.6	Locate livestock salt or mineral supplements a minimum of 500 feet away from water sources, riparian areas, and aspen stands.
Grazing-6021	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.7	Provide rest/deferment from livestock grazing following wildfire, prescribed burns, and other vegetative treatments until resource objectives are met.

% percent AMP Allotment Management Plan APD Application for Permit to Drill APHIS Animal and Plant Health Inspection Service APLIC Avian Power Line Interaction Committee BAER Burned Area Emergency Response BFO Buffalo Field Office BLM Bureau of Land Management BMP Best Management Practice CBNG Coalbed Natural Gas CFR Code of Federal Regulations CO₂ Carbon Dioxide COA Condition of Approval CSU Controlled Surface Use dBA Decibels DDCT Density and Disturbance Calculation Tool DEQ Department of Environmental Quality DFC Desired Future Condition DOI Department of the Interior EIS Environmental Impact Statement EO Executive Order ES&R Emergency Stabilization and Rehabilitation ESD Ecological Site Description GHMA General Habitat Management Area	kV kilovolt LUP Land Use Plan MOU Memorandum of Understanding NEPA National Environmental Policy Act NSO No Surface Occupancy OHV Off-Highway Vehicle PFC Proper Functioning Condition PHMA Priority Habitat Management Area PRB Powder River Basin R&VS Recreation and Visitor Services RDF Required Design Feature RMP Resource Management Plan ROD Record of Decision ROW right-of-way SRMA Special Recreation Management Area SUA Special Use Authorization TLS Timing Limitation Stipulation U.S.C. United States Code USFWS United States Fish and Wildlife Service WGFD Wyoming Game and Fish Department WNV West Nile Virus WO Washington Office WUI Wildland Urban Interface WY Wyoming
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Chapter 3. Approved Resource Management Plan

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3.1. Approved Resource Management Plan Instructions

The decisions in this Approved Resource Management Plan (RMP) will guide the Bureau of Land Management's (BLM's) management of the planning area. This Approved RMP adopts the management described in the Proposed RMP and Final Environmental Impact Statement (EIS), with adjustments, as described in the Record of Decision (ROD), as a result of protest resolution and the Governor's Consistency Review. All future resource authorizations and actions on BLM-administered lands and mineral estate within the Buffalo planning area will conform to the Approved RMP. However, this RMP does not repeal valid existing rights on public lands. A valid existing right is a claim or authorization that takes precedence over the decisions developed in this plan. If such authorizations come up for review and can be modified, they will also be brought into conformance with this RMP.

While the Proposed RMP and Final EIS constitute compliance with the National Environmental Policy Act (NEPA) for the broad-scale decisions made in this RMP, the BLM will continue to prepare Environmental Assessments (EAs) and EISs where appropriate as part of implementation-level planning and decision-making. While certain decisions, such as land use allocations (e.g., areas open/closed to oil and gas leasing), are effective immediately, implementation of these and other decisions in the RMP may require additional site-specific NEPA analysis. For instance, although the Approved RMP may identify an area as open for right-of-way (ROW) development, subsequent site-specific analysis may lead the BLM to deny authorization if development in that particular location could have adverse impacts to other values. Early consultation with the BLM will help to identify potential conflicts in advance, increasing the efficiency of the approval process. Terminology that is specific to this RMP, defined by BLM policy, or that may be unfamiliar to the general public (e.g., ROW avoidance and exclusion) are defined in the Glossary.

3.2. Goals, Objectives, and Management Decisions

Table 3.1, "1000 PHYSICAL RESOURCES (PR) – AIR QUALITY (AQ)" (p. 83), through Table 3.34, "8000 SOCIOECONOMIC RESOURCES (SR) – HEALTH AND SAFETY" (p. 157), identify the goals, objectives, and management decisions for eight resource topics composing the Approved RMP:

1000. Physical Resources – Air Quality, Geological Resources, Soil, Water Resources, and Cave and Karst Resources

2000. Mineral Resources – Locatable, Leasable, and Salable Minerals

3000. Fire and Fuels Management – Unplanned Fire (Wildfire), Planned Fire (Prescribed Fire), and Stabilization and Rehabilitation

4000. Biological Resources – Vegetation, Fish and Wildlife, and Special Status Species

5000. Heritage and Visual Resources – Cultural, Paleontological, and Visual

6000. Land Resources – Forest Products, Lands and Realty, Renewable Energy, Rights-of-Way and Corridors, Travel and Transportation Management, Recreation, Lands with Wilderness Characteristics, and Livestock Grazing Management

7000. Special Designations – Areas of Critical Environmental Concern, Scenic or Back Country Byways, Wild and Scenic Rivers, and Wilderness Study Areas

8000. Socioeconomic Resources – Social and Economic Conditions, Health and Safety, Environmental Justice, and Tribal Treaty Rights

Goals and objectives describe the desired outcomes for each resource topic. Management decisions are anticipated to achieve these goals and objectives.

The decisions in the Approved RMP are organized by the eight resource topics listed above in order to make the document as readable as possible; however, decisions for resources and resource uses are interconnected, and a comprehensive review of all eight resource topics is required to ensure a full understanding of the Approved RMP. The decisions must be understood as a whole, with references to multiple sections. For example, the oil and gas section (Decisions O&G-2001 through O&G-2008) states the acres subject to various constraints. The reason for those constraints is generally found in other programs, such as wildlife or water quality. Resource protections can be found in multiple places, such as both the cultural resources and the special status species sections.

The emphasis on Greater Sage-Grouse following the U.S. Fish and Wildlife Service (USFWS) listing decision is reflected in these decisions. However, Greater Sage-Grouse conservation measures benefit many other wildlife species and resources (e.g., viewshed, National Historic Trails settings, nonmotorized recreation). Similarly, management to protect other resources, such as limits on surface disturbance to protect viewshed, will benefit other resources such as wildlife. These points are fully explained in the Proposed RMP and Final EIS (BLM 2015b), but are repeated here to emphasize that the management decisions work as a whole and not as standalone prescriptions.

Table 3.1. 1000 PHYSICAL RESOURCES (PR) – AIR QUALITY (AQ)

GOAL PR:1 Maintain existing air quality and air quality related values such as visibility by requiring that all BLM actions minimize impacts on air quality and comply with all applicable air quality laws, rules, and regulations.		
Objectives:		
PR:1.1 Reduce the impacts of criteria pollutants and greenhouse gases associated with BLM actions in compliance with applicable state and federal AAQS.		
PR:1.2 Work cooperatively with Wyoming DEQ to reduce visibility-impairing pollutants in accordance with the State of Wyoming’s Regional Haze SIP.		
PR:1.3 Reduce atmospheric deposition of pollutants to levels below accepted and LAC.		
PR:1.4 Manage fugitive dust to reduce impacts associated with BLM actions.		
Record #	Goal/Obj.	Decisions
AQ-1001	PR:1	Manage prescribed burns to comply with Wyoming DEQ AQD smoke-management rules and regulations.
AQ-1002	PR:1	Define a criteria pollutant and AQRV monitoring strategy and cooperatively establish a monitoring network by creating a method for siting AQ monitors in order to provide additional data for describing background concentrations.
AQ-1003	PR:1	Implement mitigation measures within BLM’s authority (BMPs – for example, dust suppression) to reduce emissions from current levels in the planning area and work cooperatively to encourage industry and other permittees to adopt measures to reduce emissions.
AQ-1004	PR:1	Enhance the existing cooperative process that shares air quality information with agencies, stakeholders, and the public.
AQ-1005	PR:1	Work cooperatively with stakeholders to reduce cumulative dust emissions (i.e., Campbell County Dust Coalition) and address other air quality concerns.
AQ-1006	PR:1	Require quantitative AQ modeling of industrial activities (i.e., oil and gas or mining) expected to result in emissions where ambient conditions may approach or exceed ambient air quality standards, in consultation with the Wyoming DEQ Air Quality Division and other stakeholders, in order to determine the potential impacts of proposed emission sources and potential mitigation strategies. Appendix L (p. 539) describes AQ modeling requirements.

Table 3.2. 1000 PHYSICAL RESOURCES (PR) – SOIL

GOAL PR:2 Soil quality is maintained, improved, or restored while supporting other resource values.		
Objectives:		
PR:2.1 Achieve and maintain Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming (Appendix I (p. 419)).		
PR:2.2 Incorporate soil protection consistent with soil resource capabilities for all BLM actions.		
PR:2.3 Rehabilitate all surface-disturbing activities consistent with applicable laws, regulations, and policies.		
Record #	Goal/Obj.	Decisions
Soil-1001	PR:2.1 PR:2.2	Evaluate the effects of a proposed surface-disturbing activity to the soil resource using NRCS Soil Survey data and/or onsite investigation. Apply mitigation measures if necessary, relocate the activity to a more suitable soil type, or deny the authorization.
Soil-1002	PR:2.1 PR:2.2 PR:2.3	Authorized surface-disturbing activities will include plans for reclamation; site-specific reclamation actions should reflect the complexity of the project, environmental concerns, and the reclamation potential of the site.
Soil-1003	PR:2.2	Allow surface-disturbing activities on soils without a severe erosion hazard. Activities on highly erosive soils would be allowed with approved site-specific construction, stabilization, and reclamation plans to conserve the soil resource and meet reclamation (Appendix M (p. 555)) and resource objectives.
Soil-1004	PR:2.1 PR:2.2	Apply a CSU stipulation on soils with a severe erosion hazard with approved site-specific construction, stabilization, and reclamation plans.
Soil-1005	PR:2.2	Allow surface-disturbing activities on slopes less than 25%. Activities on slopes 25% and greater would be allowed with approved site-specific construction, stabilization, and reclamation plans to conserve the soil resource and meet reclamation (Appendix M (p. 555)) and resource objectives (Map 3-1).
Soil-1006	PR:2.2	Apply a CSU stipulation on all slopes 25% and greater with approved site-specific construction, stabilization, and reclamation plans (Map 3-1).
Soil-1007	PR:2.2 PR:2.3	Allow surface-disturbing activities on soils with poor reclamation suitability recognizing that reclamation may be challenging and that construction, stabilization, and reclamation plans are required to conserve the soil resource (Map 3-2) (Appendix M (p. 555)).
Soil-1008	PR:2.2 PR:2.3	Apply a lease notice on soils with poor reclamation suitability identifying that reclamation may be challenging and that construction, stabilization, and reclamation plans are required to conserve the soil resource (Map 3-2).
Soil-1009	PR:2.2	Avoid surface-disturbing activities on limited reclamation potential areas such as badlands, rock outcrops, biologic crusts, and slopes susceptible to mass movement (Map 3-3). Activities may be allowed in limited cases with approved site-specific construction, stabilization, and reclamation plans to conserve the soil resource and meet reclamation (Appendix M (p. 555)) and resource objectives.
Soil-1010	PR:2.2	Apply a CSU stipulation on limited reclamation potential areas such as badlands, rock outcrops, biologic crusts, and slopes susceptible to mass movement with approved site-specific construction, stabilization, and reclamation plans (Map 3-3).

Table 3.3. 1000 PHYSICAL RESOURCES (PR) – WATER

GOAL PR:3 Watershed, surface water, and groundwater resources are consistent with applicable state and federal standards and regulations.		
Objectives:		
PR:3.1 BLM actions maintain or improve watershed, wetland, and riparian functions to support desired surface-flow regimes and water quality.		
PR:3.2 Mitigate accelerated channel erosion and instability as a result of BLM actions.		
PR:3.3 Ensure adequate reclamation of reservoir structures and affected downstream channels associated with BLM actions.		
PR:3.4 Cooperatively develop monitoring, rehabilitation and restoration plans for degraded water bodies and riparian zones.		
PR:3.5 Reclaim or remove unneeded, nonfunctional or poorly-sited reservoirs on BLM-administered lands.		
PR:3.6 Continue monitoring groundwater potentially impacted as a result of BLM actions and expand the monitoring network as needed.		
PR:3.7 Minimize impacts to aquifers and groundwater quality.		
GOAL PR:4 Water availability to facilitate authorized uses while providing for the conservation of those waters.		
Objectives:		
PR:4.1 Develop new water-supply sources where appropriate during BLM actions.		
PR:4.2 Identify abandoned oil and gas wells that are desirable for conversion to livestock and wildlife water supply use.		
Record #	Goal/Obj.	Decisions
Water-1001	PR:3.1 PR:3.4	Provide an alternative or “off-source” water supply (e.g., piping water to troughs, tanks, or ponds) in locations where BLM-authorized uses are fenced out of water sources.
Water-1002	PR:4.1	Install flow-control devices on new and existing BLM-authorized water wells and spring developments and evaluate the need for additional flow-control devices on a project-specific basis.
Water-1003	PR:3.1 PR:3.7	File for water rights on BLM water projects.
Water-1004	PR:3.1 PR:3.2	Manage surface-disturbing activities to prevent degradation of water quality for all waters.

Record #	Goal/Obj.	Decisions
Water-1005	PR:3.6 PR:3.7	Minimize impacts to water quality and quantity during BLM-authorized actions. BLM will work with Wyoming DEQ to assess impacts and develop mitigation. Appendix N (p. 563) describes the process the BLM will use to analyze impacts to water resources, identifies monitoring objectives, and provides mitigation options that can be applied to proposed activities on BLM-administered land and mineral estate to protect water resources. Allow BLM authorized activities and infrastructure in Source Water Protection Areas identified in Wellhead or Source Water Protection Plans approved by local governing bodies, and sensitive aquifer systems identified through the use of the Wyoming Groundwater Vulnerability Assessment Handbook or similar document as updated over time, with site specific plans to prevent contamination of these sensitive water resources.
Water-1006	PR:3.1 PR:3.2 PR:3.4	Manage water resources to meet the Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming, achieve PFC, and meet Wyoming water quality standards. Take appropriate actions to improve the biological, chemical, and geomorphic conditions of streams adversely impacted by BLM-authorized actions and permitted activities.
Water-1007	PR:3.1 PR:3.2 PR:3.4	Design and manage land use and surface-disturbing activities to reduce channel and bank erosion and the associated loss of riparian habitats.
Water-1008	PR:3.1 PR:3.3 PR:3.5	Allow for on-channel reservoirs affecting natural streamflow regimes in consideration of other resource values.
Water-1009	PR:3.1 PR:3.2	Authorize activities associated with the surface discharge of water produced during federal activities if erosive conditions, channel stability, soil characteristics, and other resource values warrant. Coordinate permitting process with the State of Wyoming.
Water-1010	PR:3.1 PR:3.2	Maintain existing water supply sources where possible, otherwise supply new water sources to meet demand and need, consistent with other resources. Coordinate the permitting process with the Wyoming State Engineer's Office.
Water-1011	PR:3.7 PR:4.1 PR:4.2	Allow abandoned oil and gas wells to be converted to water supply wells if a beneficial use, as determined by the Wyoming State Engineer's Office can be demonstrated.
Water-1012	PR:4	Encourage alternative energy (e.g., solar and wind) to power new water resource developments versus overhead power or petroleum based.
Water-1013	PR:3.1 PR:3.2	Allow surface disturbance within 500 feet of springs, non-CBNG reservoirs, water wells, or perennial streams with an approved site-specific plan that ensures construction, stabilization and reclamation methods are meeting water and other resource objectives including, but not limited to soil, slope, and vegetation, and wildlife habitat.
Water-1014	PR:3.1 PR:3.2	Apply a CSU stipulation to any fluid mineral lease within 500 feet of any spring, non-CBNG reservoir, water well, or perennial stream, based on other resource values, including, but not limited to soil, slope, and vegetation.
Water-1015	PR:3.1 PR:3.2 PR:3.4	Manage riparian and uplands to restore perennial flows or standing water.
Water-1016	PR:3.1 PR:3.3 PR:3.5	Evaluate unneeded reservoirs for removal and reclamation.

Table 3.4. 1000 PHYSICAL RESOURCES (PR) – CAVE AND KARST

GOAL PR:5 Significant cave and karst resources are conserved.		
Objectives:		
PR:5.1 Identify and determine cave and karst resources that meet significance criteria of 43 CFR 37.11(c).		
PR:5.2 Manage significant cave and karst resources while supporting other resource values.		
Record #	Goal/Obj.	Decisions
Cave-1001	PR:5.1	Conduct cave inventories and significance determinations.
Cave-1002	PR:5.1	Inventory and map cave and karst areas.
Cave-1003	PR:5.2	Manage human activity in caves with significant resources by developing and implementing a Cave Management Plan for the planning area, with potential cave specific components.
Cave-1004	PR:5.2	Apply a CSU stipulation within cave and karst areas. Note: Mineral resource activities would likely be required to maintain a site-specific buffer around significant cave entrances and passages.
Cave-1005	PR:5.2	Require a site-specific buffer from significant cave entrances for surface-disturbing activities.
Cave-1006	PR:5.2	Require forest management to maintain a site-specific buffer from significant cave entrances.
Cave-1007	PR:5.2	Restrict livestock from entrances to significant caves.

Table 3.5. 2000 MINERAL RESOURCES (MR) – LOCATABLE MINERALS

GOAL MR:1 Federal mineral lands are open to mineral entry to support short-term and long-term domestic needs.		
Objectives:		
MR:1.1 Provide opportunities for the exploration and development of locatable minerals, as well as mill and tunnel site operations, while avoiding or mitigating the effects of these activities on other resource values so that unnecessary or undue degradation is prevented.		
MR:1.2 Provide opportunities for the exploration, development, and reclamation of locatable minerals (including uranium), as well as mill and tunnel site operations, in coordination with other governmental agencies.		
Record #	Goal/Obj.	Decisions
Locatable-2001	MR:1.1	Lands not formally withdrawn or segregated from mineral entry are open for the exploration and development of locatable minerals.
Locatable-2002	MR:1.2	Implement the MOUs between BLM and Wyoming DEQ, and BLM and NRC, addressing locatable mineral exploration, development, and reclamation activities.
Locatable-2003	MR:1.1	Recommend withdrawals from mineral entry for areas identified within the Approved RMP to conserve other resource values (Map 3-4). This results in: • 694,619 acres remain open to mineral entry, if all acres recommended for withdrawal are withdrawn. • 115,614 acres recommended for withdrawal from mineral entry. • 11,373 acres remain withdrawn from mineral entry.

Table 3.6. 2000 MINERAL RESOURCES (MR) – LEASABLE – COAL

GOAL MR:2 Leasable coal resources are available to support domestic and export needs.		
Objectives:		
MR:2.1 Maintain coal leasing and exploration, while minimizing impacts to other resource values.		
MR:2.2 Manage opportunities for exploration and development of coal resources.		
Record #	Goal/Obj.	Decisions
Coal-2001	MR:2.1 MR:2.2	Coal planning was completed as part of the April 2001 BFO RMP update. At that time the four coal planning screens (i.e., coal development potential, unsuitability, multiple use and surface owner consultation) were applied to certain federal coal lands within the BFO planning area. The result of this planning effort was a decision identifying lands acceptable for further coal leasing consideration. The coal management decisions made in the BFO RMP update will be carried forward in this Approved RMP (Map 3-5). Federal coal lands identified acceptable for further coal leasing consideration are available for Lease By Applications, lease modifications, emergency leases, and exchanges. Prior to offering a coal tract for sale, the need to reapply the unsuitability criteria will be reviewed, a tract specific NEPA analysis will be completed, and there will be opportunity for public comment. At the time an application for a new coal lease or lease modification is submitted to the BLM, the BLM will determine whether the lease application area is "unsuitable" for all or certain coal mining methods pursuant to 43 CFR 3461.5. Priority habitat (core population areas and core population connectivity corridors) is essential habitat for maintaining Greater Sage-Grouse for purposes of the suitability criteria set forth at 43 CFR 3461.5(o)(1).
Coal-2002	MR:2.1 MR:2.2	Stipulate fluid mineral leases when nominated over existing coal leases to allow maximum recovery of the coal resources. When an oil and gas parcel is nominated over a coal lease application or coal lease modification application, the parcel will be pulled from the oil and gas sale list and deferred until such time a coal lease is issued. Once a coal lease is issued or the sale cancelled and the case closed, the deferred parcel nomination may be added to the oil and gas lease sale list with stipulations.

Table 3.7. 2000 MINERAL RESOURCES (MR) – LEASABLE – FLUID (Oil/Gas and Geothermal)

GOAL MR:3 Leasable fluid mineral resources are available to support domestic needs.		
Objectives:		
MR:3.1 Provide opportunities for exploration, leasing, and development of fluid mineral resources.		
MR:3.2 Facilitate the evaluation of BLM-administered lands for fluid mineral potential.		
MR:3.3 Manage BLM-administered lands for collection of subsurface geological (geophysical) data to aid in the exploration of fluid mineral resources.		
MR:3.4 Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside of Greater Sage-Grouse habitat. When analyzing leasing and authorizing development of fluid mineral resources, including geothermal, in priority habitat (core population areas and core population connectivity corridors) and general habitat, and subject to applicable stipulations for the conservation of Greater Sage-Grouse, priority will be given to development in non-habitat areas first and then in the least suitable habitat for Greater Sage-Grouse. The implementation of these priorities will be subject to valid existing rights and any applicable law or regulation, including, but not limited to, 30 U.S.C. 226(p) and 43 CFR 3162.3-1(h). Where a proposed fluid mineral development project on an existing lease could adversely affect Greater Sage-Grouse populations or habitat, the BLM will work with the lessees, operators, or other project proponents to avoid, reduce and mitigate adverse impacts to the extent compatible with lessees' rights to drill and produce fluid mineral resources. The BLM will work with the lessee, operator, or project proponent in developing an APD for the lease to avoid and minimize impacts to Greater Sage-Grouse or its habitat and will ensure that the best information about the Greater Sage-Grouse and its habitat informs and helps to guide development of such federal leases.		
Record #	Goal/Obj.	Decisions
N/A	N/A	Appendix O (p. 601) describes the process for oil and gas development, from exploration to production, on BLM-administered federal mineral estate. Appendix B (p. 223) describes in greater detail the lease stipulations contained in the Buffalo Approved RMP along with exception, modification, and waiver criteria. Maps 3-8 through 3-13 display overlapping fluid mineral lease stipulations by stipulation type (TLS, CSU, and NSO) and resource category (e.g., physical, biological, and cultural resources). The following Fluid Mineral Constraints Definitions apply only to fluid mineral management within the BFO planning area. Closed: ● Closed, withdrawn, or otherwise closed Major: ● NSO more than 40 acres in size or more than 0.25 mile in width ● TLS lasting 6 months or longer ● Prohibition on surface disturbance more than 40 acres in size or more than 0.25 mile in width ● VRM Class I Moderate: ● CSU more than 40 acres in size or more than 0.25 mile in width ● NSO less than 40 acres in size or less than 0.25 mile in width ● TLS lasting more than 60 days but less than 6 months ● Avoidance of 200 meters or more ● VRM Class II

Record #	Goal/Obj.	Decisions
		Minor: • CSU less than 40 acres in size or less than 0.25 mile in width • TLS lasting less than 60 days • Avoidance of less than 200 meters • VRM Class III Open (standard): • Subject to standard lease terms and conditions, existing laws, regulations and formal orders
O&G-2001	MR:3.1	Continue to require lessees to conduct operations in a manner that minimizes adverse impacts to other resources and other land uses and users. Where the federal government owns the mineral estate in Greater Sage-Grouse habitat and the surface is in non-federal ownership, apply to BLM authorizations regulating the federal lessee the same stipulations, COAs, and/or conservation measures and RDFs applied if the mineral estate is developed on BLM-administered surface lands in that management area, to the maximum extent permissible under existing authorities, and in coordination with the landowner. Where the federal government owns the surface and the mineral estate is in non-federal ownership in Greater Sage-Grouse habitat, apply appropriate surface use COAs, stipulations, and mineral RDFs through ROW grants or other surface management instruments, to the maximum extent permissible under existing authorities, in coordination with the mineral estate owner/lessee.
O&G-2002	MR:3.1 MR:3.2 MR:3.3	Open all oil and gas mineral estate to leasing, unless specifically identified as closed to mineral leasing. These open areas will be managed on a project-specific basis. Areas closed due to regulation, legislation, policy, or similar action: • Incorporated municipalities and proximity to commercial airports • WSAs and WSRs • Withdrawals
O&G-2003	MR:3.1 MR:3.2 MR:3.3	Manage any acquired mineral estate, obtained during land tenure adjustments, in accordance with the management of the surrounding areas.
O&G-2004	MR:3.1 MR:3.2 MR:3.3	Defer fluid mineral leasing in areas where coal is already leased until fluid mineral development would not interfere with the economic recovery of the coal resources. This is determined on a project-specific basis during fluid mineral lease review.
O&G-2005	MR:3.1	Make geothermal resources available for leasing in areas that are open to oil and gas leasing. Areas closed to oil and gas leasing are also closed to geothermal leasing.
O&G-2006	MR:3.3	Areas that are open to oil and gas leasing are open to geophysical exploration subject to appropriate mitigation developed through use of the mitigation guidelines described in Appendix F (p. 397). Areas closed to oil and gas leasing are closed to geophysical exploration. Geophysical exploration is subject to motorized travel limitations and restrictions on surface-disturbing and disruptive activities. Geophysical exploration projects that are designed to minimize habitat fragmentation within PHMA would be allowed, except where prohibited or restricted by LUP decisions, and in conformance with timing and distances Management Decisions (see SS WL-4024).

Record #	Goal/Obj.	Decisions
O&G-2007	MR:3.1 MR:3.2 MR:3.3	Make lands available for fluid mineral leasing and exploration in accordance with management identified within the Approved RMP to conserve other resources (Map 3-6). This results in: • 72,276 acres closed to fluid mineral leasing. • 135,909 acres subject to the standard lease terms and conditions. • 104,927 acres subject to minor constraints. • 2,516,826 acres subject to moderate constraints. • 556,592 acres subject to major constraints.
O&G-2008	MR:3.1 MR:3.2	Stipulate fluid mineral leases when nominated over existing coal leases to allow maximum recovery of the coal resources. When an oil and gas parcel is nominated over a coal lease application or coal lease modification application, the parcel will be pulled from the oil and gas sale list and deferred until such time a coal lease is issued. Once a coal lease is issued or the sale cancelled and the case closed, the deferred parcel nomination may be added to the oil and gas lease sale list with stipulations.

Table 3.8. 2000 MINERAL RESOURCES (MR) – LEASABLES – OTHER LEASABLE MINERALS

GOAL MR:4 Manage leasable minerals other than oil, gas, coal, and geothermal energy based on demand, while avoiding or mitigating impacts to other resource values.		
Objective:		
MR:4.1 Make opportunities available for exploration and development of leasable minerals other than oil, gas, coal, and geothermal energy, while avoiding or mitigating impacts of these activities on other resource values.		
Record #	Goal/Obj.	Decisions
OL-2001	MR:4.1	All lands in the planning area are available to exploration and development of other leasable minerals unless closed to mineral leasing. All non-energy leasable mineral activities would be considered in PHMA, provided that the activities can be completed in compliance with all Greater Sage-Grouse occupancy, timing, density and disturbance restrictions (see SS WL-4024).
OL-2002	MR:4.1	Allow leasing of other leasable minerals in accordance with management identified within the Approved RMP, as consistent with other resource values. This results in: • 3,801,889 acres open to leasing of other leasable minerals. • 4,699,229 acres closed to leasing of other leasable minerals.

Table 3.9. 2000 MINERAL RESOURCES (MR) – SALABLE MINERALS

GOAL MR:5 Salable mineral resources (also called mineral materials) are available to support short-term and long-term local and regional demand.		
Objective:		
MR:5.1 Provide opportunities for exploration and development of salable minerals while avoiding or mitigating effects to other resource values.		
Record #	Goal/Obj.	Decisions
Salable-2001	MR:5.1	The majority of lands in the planning area, including federally administered surface/minerals and split estate, are available for mineral material exploration and development (Map 3-7).
Salable-2002	MR:5.1	Allow salable mineral exploration and development in accordance with management identified within the Approved RMP, as consistent with other resource values (Map 3-7). This results in: • 2,725,060 acres remain open to salable mineral exploration and development. • 623,061 acres closed to or restricted from salable mineral exploration and development. • 28,931 acres remain closed to salable minerals activities in the three current WSAs.

Table 3.10. 3000 FIRE AND FUELS MANAGEMENT (FM)

GOAL FM:1 Life, property, and resource values are protected. The protection of human life is the single, overriding priority. Setting priorities among protecting human communities and community infrastructure, other property and improvements, and natural and cultural resources will be done based on the values to be protected, human health and safety, and the costs of protection.

Objectives:

FM:1.1 Respond to unplanned wildfires based on: (1) ecological, (2) social, and (3) legal consequences while supporting other resource values.

FM:1.2 Maintain partnerships with interagency cooperators and the public to strengthen coordination of all fire suppression activities.

FM:1.3 Manage fuels in WUI areas to reduce potential losses due to fire consistent with the BLM's 10-year comprehensive strategy.

FM:1.4 Cooperate with stakeholders to enhance the local fire prevention, defensible space protection, and public education programs.

FM:1.5 Implement appropriate emergency stabilization and rehabilitation actions following wildland fire.

FM:1.6 Pursue wildland fire management agreements to achieve resource objectives while protecting life and property.

GOAL FM:2 Plant community and hazardous fuel objectives are achieved.

Objectives:

FM:2.1 Improve fire regime condition class and maintain or improve conditions of fire-adapted landscapes by managing fire, planned and unplanned, to accomplish beneficial resource objectives.

FM:2.2 Cooperate with stakeholders to plan and implement fire and other vegetation treatments.

FM:2.3 In collaboration with stakeholders, manage and coordinate fire and fuel treatments consistent with approved local fire plans (CWPP).

Record #	Goal/Obj.	Decisions
Fire-3001	FM:1.1	A Fire Management Plan for the Wyoming High Plains District will be maintained that more specifically outlines management response and implementation actions for wildland fire response of public lands.
Fire-3002	FM:1.1	A resource advisor appropriate to the potentially affected resource will be consulted, or assigned, to all wildland fires that involve or threaten BLM-administered lands.
Fire-3003	FM:1.1	Restrict or prohibit fire retardant chemicals as appropriate to protect rock art.
Fire-3004	FM:1.1	Prohibit use of retardant or foam within 300 feet of surface water sources consistent with guidelines described in the <i>Interagency Standards for Fire and Fire Aviation Operations</i> (BLM 2011b).
Fire-3005	FM:1.3 FM:1.4	Reduce hazardous fuels in the WUI.

Record #	Goal/Obj.	Decisions
Fire-3006	FM:1.5	Implement the BLM Emergency Stabilization and Burned Area Rehabilitation standards located in the DOI Interagency Burned Area Emergency Response Guidebook (DOI 2004) and BLM Burned Area Emergency Stabilization and Rehabilitation Handbook (BLM 2007a) as needed. Appendix P (p. 625) provides additional information regarding the BLM's approach to emergency stabilization and rehabilitation.
Fire-3007	FM:2.1	Use the District Fire Management Plan to implement the objectives of this RMP; to address fire management on a landscape scale, to maintain or improve conditions in fire-adapted landscapes, and to accomplish resource management objectives.
Fire-3008	FM:2.2	Ensure all prescribed burning activities comply with Wyoming DEQ air quality standards and smoke management rules. For fuels management, the BLM would consider multiple tools for fuels reduction and would analyze in NEPA compliance documentation before electing to implement prescribed fire in PHMAs. If prescribed fire is used in Greater Sage-Grouse habitat, the NEPA analysis for the Burn Plan will address: • why alternative techniques were not selected as a viable options; • how Greater Sage-Grouse goals and objectives would be met by its use; • how the Conservation Objectives Team Report objectives would be addressed and met; • a risk assessment to address how potential threats to Greater Sage-Grouse habitat would be minimized. Prescribed fire as a vegetation or fuels treatment shall only be considered after the NEPA analysis for the Burn Plan has addressed the four bullets outlined above. Prescribed fire could be used to meet specific fuels objectives that would protect Greater Sage-Grouse habitat (e.g., creation of fuel breaks that would disrupt the fuel continuity across the landscape in stands where annual invasive grasses are a minor component in the understory, burning slash piles from conifer reduction treatments, used as a component with other treatment methods to combat annual grasses and restore native plant communities). Prescribed fire in known Greater Sage-Grouse winter range shall only be considered after the NEPA analysis for the Burn Plan has addressed the four bullets outlined above. Any prescribed fire in winter habitat would need to be designed to strategically reduce wildfire risk around and/or in the winter range and designed to protect winter range habitat quality.
Fire-3009	FM:2.2 FM:2.3	Cooperate with and pursue agreements with other agencies and landowners to conduct landscape treatments to achieve enhanced fuels management and/or restoration of fire-adapted ecosystems.
Fire-3010	FM:1.5	Rehabilitate firelines constructed by heavy equipment, or on steep slopes, to prevent or control erosion. Rehabilitation includes, but is not limited to, water barring and reseeded.
Fire-3011	FM:1.1 FM:1.2	Response to wildfire varies from full protection in areas where fire is undesirable to monitoring fire behavior in areas where fire can be managed to accomplish other resource objectives. The entire planning area is available to manage wildfire for multiple objectives.

Record #	Goal/Obj.	Decisions
Fire-3012	FM:1.1 FM:1.2	Prohibit heavy equipment use within the following areas, except when human safety is at risk or if the expected fire effects would cause more resource damage than the use of heavy equipment: • Areas of cultural resource sensitivity • Riparian/wetland habitats • Identified Greater Sage-Grouse important habitats: Core Population Areas, nesting, brood-rearing, Core Population Connectivity Corridors, or winter habitat • Areas of highly erosive soils • Lands with wilderness characteristics Limit heavy equipment usage to existing roads and trails, or immediately adjacent to them, in areas not identified as full protection.
Fire-3013	FM:1.1 FM:1.2	Use protection strategies in the following areas: • WUI • Wildland Industrial Interface • Developed recreation • Developed electronic/communication sites of all types • Where sensitive or high value resources would be adversely affected by fire (i.e., Greater Sage-Grouse Core Population Area and Connectivity Corridor)
Fire-3014	FM:1.5	Evaluate all fires and rehabilitate fire-damaged lands as needed to meet resource objectives. Repair suppression damages as necessary. Post ES&R and BAER management would be designed to ensure long-term persistence of seeded or pre-burn native plants. This may require temporary or long-term changes in livestock grazing, wild horse, and travel management, etc., to achieve and maintain the desired condition of ES&R and BAER projects to benefit Greater Sage-Grouse (Eiswerth and Shonkwiler 2006). The BLM could bring in BAR and BAER teams who would work collaboratively with partners at the federal, state, and local level to rehabilitate and restore Greater Sage-Grouse habitats in a manner consistent with the core habitat population area strategy for conservation. DDCT reviews would be conducted in coordination with the WGFD Habitat Protection Program located in Cheyenne, Wyoming at the WGFD headquarters. Areas within PHMAs would be high priority for restoration of Greater Sage-Grouse habitat beyond immediate response.
Fire-3015	FM:1.6	Use wildland fire and other vegetation treatments to meet desired management objectives.

Table 3.11. 4000 BIOLOGICAL RESOURCES (BR) – VEGETATION

GOAL BR:1 Vegetation resources sustained in desired ecological conditions. Objectives: BR:1.1 Manage communities for a diversity of native species, habitats, seral stages, and distribution. BR:1.2 Manage for healthy vegetation communities to ensure their capability to provide sufficient plant composition, cover, and litter accumulation to protect soils from wind and water erosion and enhance nutrient cycling and productivity. BR:1.3 Reclaim areas affected by surface-disturbing activities to promote healthy functioning native plant communities. BR:1.4 Manage habitat to facilitate the conservation, recovery, and maintenance of populations of native, desirable non-native, and special status plant species consistent with appropriate local, state, and federal conservation requirements and management plans. BR:1.5 Manage for healthy native plant communities by reducing and managing invasive, non-native noxious species. BR:1.6 Identify and manage Native American traditional plant gathering areas.
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Table 3.12. 4000 BIOLOGICAL RESOURCES (BR) – VEGETATION – FORESTS AND WOODLANDS

GOAL BR:2 Healthy forests and woodlands are sustained in desired ecological conditions.		
Objective:		
BR:2.1 Manage forests and woodlands to benefit multiple resource values.		
Record #	Goal/Obj.	Decisions
Forest-4001	BR:2.1	Design and implement silvicultural treatments to maximize forest health.
Forest-4002	BR:2.1	Utilize intensive management tactics to manage for desired forest/woodland health (HFRA) and to reduce or circumvent events such as insects, disease, and wildfire.
Forest-4003	BR:2.1	Manage old growth forest stands to emphasize old growth characteristics.
Forest-4004	BR:2.1	Manage forests/woodlands to emphasize multiple resource values (recreation, wildlife, soils, water, forest products).
Forest-4005	BR:2.1	Manage aspen communities to maintain aspen stands and strive for DFC in all aspen forests.
Forest-4006	BR:2.1	Actively manage woodlands to prevent expansion into other communities consistent with multiple resource values, on a project-specific basis.

Table 3.13. 4000 BIOLOGICAL RESOURCES (BR) – VEGETATION – GRASSLAND AND SHRUBLAND COMMUNITIES

GOAL BR:3 A diverse landscape of native grasslands and shrublands sustained in desired ecological conditions.		
Objective:		
BR:3.1 Manage for a full range of sagebrush, shrub, and grassland communities with diverse native species and subspecies, composition, canopies, densities, and age classes across the landscape.		
Record #	Goal/Obj.	Decisions
GS-4001	BR:3.1	Manage vegetative communities (Map 3-14) in accordance with Wyoming Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming.
GS-4002	BR:3.1	Complete vegetation inventories. When applicable do so in coordination with stakeholders.
GS-4003	BR:3.1	Use an integrated management approach (e.g., mechanical, chemical, biological treatments, prescribed fire, and grazing management techniques) to maintain, restore, and enhance the health and diversity of plant communities to achieve resource or multi-resource objectives.
GS-4004	BR:3.1	Maintain sustainable forage levels for livestock and wildlife habitats.
GS-4005	BR:3.1	Manage grasslands and shrublands to protect, preserve, or enhance plant communities.
GS-4006	BR:3.1	Manage the siting of facilities and related infrastructure (utility corridors, roads) to reduce impacts to vegetation resources.
GS-4007	BR:3.1	Manage the planning and development of travel routes, recreational uses, mineral exploration and development sites, and ROW to reduce impacts to the vegetation resource.
GS-4008	BR:3.1	Develop a contingency plan addressing catastrophic natural events such as drought, wildfires, and large-scale pest infestations, incorporating strategies that best protect vegetation resources.
GS-4009	BR:3.1	Work with landowners on split estate lands to reestablish disturbed sites to healthy plant communities in accordance with the ecological site potential.
GS-4010	BR:3.1	Allow desirable non-native plant species for short-term reclamation activities as a component in an authorized reclamation plan (followed up with planting of native species).

Table 3.14. 4000 BIOLOGICAL RESOURCES (BR) – VEGETATION – RIPARIAN/WETLAND RESOURCES

GOAL BR:4 Health and functional capabilities in riparian/wetland systems.		
Objectives:		
BR:4.1 Manage lotic and lentic wetland/riparian systems at a minimum to achieve and/or maintain PFC.		
BR:4.2 Improve riparian systems and wetlands in systems operating at less than PFC.		
BR:4.3 Manage contributing watersheds to sustain riparian health and water quality.		
BR:4.4 Manage and enhance riparian and wetland systems for plant, insect, fish and wildlife species that depend on these systems for their health and well being.		
BR:4.5 CBNG created riparian and wetland systems will be evaluated, retained, or reclaimed to support vegetation and other resource values.		
Record #	Goal/Obj.	Decisions
Riparian-4001	BR:4.1 BR:4.2 BR:4.3 BR:4.4	Inventory lotic and lentic riparian/wetland systems.
Riparian-4002	BR:4.1 BR:4.2 BR:4.4	Prioritize, and develop activity and implementation plans to manage riparian systems to be at or above, or continue to be improving toward, PFC while achieving the Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming.
Riparian-4003	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	Manage riparian and wetland systems to enhance forage conditions and improve water quality. Manage all riparian systems with sensitive species concerns to a succession stage appropriate for that system, including vertical as well as horizontal vegetative structure and composition.
Riparian-4004	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	Expand and enhance riparian/wetland systems and habitat in cooperation with stakeholders.
Riparian-4005	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	Prevent degradation, loss, or destruction of riparian/wetland habitat.
Riparian-4006	BR:4.4 BR:4.5	Prohibit conflicting uses within riparian research areas and special exclosures, such as waterfowl reservoirs and wetland systems on springs and streams.
Riparian-4007	BR:4.5	Evaluate CBNG created riparian and wetland systems for retention or reclamation.
Riparian-4008	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	Allow surface-disturbing activities within 500 feet of riparian/wetlands systems with an approved site-specific plan that ensures construction, stabilization, and reclamation methods are meeting resource objectives, including, but not limited to soil, vegetation and wildlife habitat.
Riparian-4009	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	Apply a CSU stipulation to any fluid mineral lease within 500 feet of riparian/wetlands systems, and aquatic habitats (based on other resource values - soil, slope).

Record #	Goal/Obj.	Decisions
Riparian-4010	BR:4.1 BR:4.3 BR:4.4	Identify and manage systems capable of achieving DFC.
Riparian-4011	BR:4.5	Restore vegetation in CBNG supported wetland and riparian systems on BLM surface and/or lease in accordance with the ecological site potential.

Table 3.15. 4000 BIOLOGICAL RESOURCES (BR) – INVASIVE SPECIES AND PEST MANAGEMENT

GOAL BR:5 Healthy native communities with manageable levels of pathogens, undesirable, invasive, non-native, or noxious species.		
Objectives:		
BR:5.1 Develop and maintain baseline information regarding the extent, location, and potential impact(s) of pest species. From this baseline information develop and implement an Integrated Pest Management Plan. Integrated management would be used to control, suppress, and eradicate, where possible, noxious and invasive species per BLM Handbook H-1740-2. Manage noxious or invasive species treatments to maintain or improve Greater Sage-Grouse habitat. Apply Required Design Features as Conditions of Approval, such as those in Appendix C (p. 285). Encourage the use of voluntary BMPs.		
BR:5.2 Facilitate support for an integrated approach for the detection, management, or eradication of new and minor infestations.		
BR:5.3 Develop, implement, and maintain a management program for annual bromes and other invasive or undesirable species not listed as noxious, utilizing the best available science and BMPs.		
BR:5.4 Coordinate with APHIS to facilitate pest and predator management.		
Record #	Goal/Obj.	Decisions
Pest-4001	BR:5.1 BR:5.2 BR:5.4	Cooperate with APHIS to control grasshoppers and Mormon crickets on public lands in conjunction with the control efforts initiated on adjoining non-federal lands.
Pest-4002	BR:5.1 BR:5.2 BR:5.3 BR:5.4	Manage designated pests on public surface lands using an Integrated Pest Management Approach consistent with DOI Manual 517 (BLM 2007b).
Pest-4003	BR:5.1 BR:5.2 BR:5.3 BR:5.4	Limit surface disturbance to the minimum needed for safe project completion to limit the spread of noxious weeds.
Pest-4004	BR:5.1 BR:5.2 BR:5.3	Use certified noxious weed seed-free products on all BLM-administered projects and lands.
Pest-4005	BR:5.1 BR:5.2 BR:5.3	Implement and maintain cooperative integrated pest management programs with county weed and pest districts, state agencies, private industry, grazing lessees, and other stakeholders in conjunction with BLM weed and pest control work on public lands adjoining deeded and state lands.
Pest-4006	BR:5.2	Require surface or vegetation disturbance areas, including areas formerly receiving or holding water, be treated for invasive species and revegetated.
Pest-4007	BR:5.2	Authorize aerial application in areas where topography, extent of infestation, target species, and timing limit other application methods.
Pest-4008	BR:5.1	Develop long range pest management plans, treatment areas, priorities, etc. in cooperation with stakeholders.
Pest-4009	BR:5.1 BR:5.2 BR:5.3	Treat those plants on the State of Wyoming Designated list, the appropriate county lists, and other species of concern as determined by BLM resource specialists. Note: Priority treatments are those areas where infestations on private land are threatening public lands. Treat areas that contain annual bromes and/or other invasive species to minimize competition and favor establishment of desired species.
Pest-4010	BR:5.3	Designate and prioritize areas for the treatment of annual brome species.

Table 3.16. 4000 BIOLOGICAL RESOURCES (BR) – FISH & WILDLIFE RESOURCES

GOAL BR:6 Distribution and abundance of all native and desirable non-native species are optimized. Objectives: BR:6.1 BLM actions prevent and/or reduce impacts to desirable species. BR:6.2 In coordination with cooperating agencies, develop and implement an achievable Wildlife Monitoring and Protection Plan. BR:6.3 Maintain, restore, or improve the continuity and productivity of fish and wildlife habitats to support WGFD population objectives. BR:6.4 Develop and implement an adaptive conservation and management strategy. GOAL BR:7 Sufficient functional habitat for native and desirable non-native species. Objectives: BR:7.1 Evaluate, update, and revise as necessary existing Wildlife Habitat Management Plans. BR:7.2 Develop Wildlife Habitat Management Plans for areas with important habitats. BR:7.3 Manage habitat consistent with local, state, and federal management plans, as applicable. BR:7.4 Continue to gather habitat and population data while concurrently monitoring human and natural disturbance dynamics to improve habitat management. BR:7.5 Provide security habitat, sufficient in amount and distribution, to support WGFD population objectives for fish and wildlife to escape from disruptive activities. BR:7.6 Maintain and provide functioning sagebrush habitat to sustain sagebrush obligates and other sagebrush dependent species.
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GOAL BR:8 Fish and wildlife are able to move between areas of functionally intact habitat.

Objectives:

BR:8.1 Develop Travel Management Plans for areas important for fish and wildlife while supporting other resource values.

BR:8.2 Develop a ROW Management Plan for utility corridors to manage impacts to areas of habitat important to fish and wildlife consistent with other resource values.

BR:8.3 Land acquisitions should support desirable fish and wildlife populations or habitat.

BR:8.4 Restore functionality to areas of degraded habitat important to fish and wildlife populations consistent with other resource values.

GOAL BR:9 Terrestrial and aquatic ecosystems that provide recreational and educational benefits.

Objectives:

BR:9.1 Manage for a broad range of wildlife and fisheries based experiences.

BR:9.2 Improve public awareness, understanding, and support for resolving issues surrounding species conservation, management, and ecology.

BR:9.3 Identify, develop, and maximize distribution of natural resource interpretation media.

BR:9.4 Provide for research to support the management of fish and wildlife resources administered by the BLM.

Record #	Goal/Obj.	Decisions
Fish		
Fish-4001	BR:6.1 BR:6.3 BR:6.4 BR:7.3 BR:7.4 BR:7.5 BR:8.1 BR:8.2 BR:9.1	Develop appropriate mitigation for surface-disturbing and disruptive activities associated with fish management through use of the mitigation guidelines described in Appendix F (p. 397).
Fish-4002	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	Manage barriers to fish passage in cooperation with the WGFD and other stakeholders.
Fish-4003	BR:6.3 BR:6.4 BR:7.3 BR:7.4 BR:8.3 BR:9.1 BR:9.2 BR:9.3	Provide public access to fish bearing waters in cooperation with WGFD Private Lands – Public Access Program and stakeholders.

Record #	Goal/Obj.	Decisions
Fish-4004	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	Manage activities potentially affecting native and desirable non-native fish species in collaboration with the WGFD and other stakeholders.
Fish-4005	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.3 BR:7.4 BR:7.5 BR:8.4	Manage harmful non-native riparian vegetation in river and stream systems important to fish species in cooperation with the WGFD and other stakeholders.
Fish-4006	BR:6.3 BR:6.4 BR:7.3 BR:7.4 BR:8.3 BR:9.1 BR:9.2 BR:9.3	Work with stakeholders to provide fisheries outreach and education.
Fish-4007	BR:6.3 BR:6.4 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	Cooperate with the WGFD in introducing or reintroducing native and desirable non-native fish in support of WGFD and BLM objectives.
Fish-4008	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	Maintain or enhance streams and riparian areas associated with Class I and II streams (WGFD classifications), Powder River, Tongue River, and other appropriate areas for desired fisheries potential.
Fish-4009	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	Incorporate fisheries enhancement in reservoir design consistent with other resource values.
Fish-4010	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	Maintain or enhance fish habitat with actions affecting perennial waters consistent with other resource values.
Fish-4011	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	Identify and manage fish habitat capable of achieving DFC. Manage all other areas with fish habitat to meet PFC.
Fish-4012	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:9.1	Allow surface-disturbing activities within 0.25 mile of naturally occurring water bodies containing native and desirable non-native fish species where fish resource objectives can be met.
Fish-4013	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:9.1	Apply a CSU stipulation within 0.25 mile of naturally occurring water bodies containing native and desirable non-native fish species.

Record #	Goal/Obj.	Decisions
Fish-4014	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:8.4 BR:9.1	Design crossings of water bodies identified as supporting fish to allow fish passage.
Fish-4015	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	Perform restoration of important instream segments for fish habitat in accordance with WGFD priorities.
Wildlife		
WL-4001	BR:7.3 BR:7.4 BR:7.5 BR:8.1 BR:8.2 BR:8.4	Develop appropriate mitigation for surface-disturbing and disruptive activities associated with wildlife habitat management through use of the mitigation guidelines described in Appendix F (p. 397).
WL-4002	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.3 BR:8.4	Maintain or improve important wildlife habitats through vegetative manipulations, habitat improvement projects, livestock grazing strategies and the application of The Wyoming Guidelines for Managing Sagebrush Communities with Emphasis on Fire Management (Wyoming Interagency Vegetation Committee 2002) and Appendix F (p. 397), WGFD Strategic Habitat Plan (WGFD 2001), State Wildlife Action Plan (WGFD 2010), and similar guidance updated over time.
WL-4003	BR:7.1	Continue to use existing Habitat Management Plans and update as necessary to include management objectives and prescriptions for wildlife: South Big Horns Habitat Management Plan (BLM 1986b), including a portion or all of the Gardner Mountain and North Fork WSAs; Wetlands Habitat Management Plan (BLM 1986a); and Middle Fork Powder River Habitat Management Plan (BLM 1980).
WL-4004	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.3 BR:7.4 BR:8.4 BR:9.1 BR:9.2	Coordinate authorized animal damage control with federal and state wildlife agencies, and other agencies, as appropriate, using guidance provided by the existing MOU with APHIS Wildlife Services.
WL-4005	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.4 BR:9.1 BR:9.2	Consult with the WGFD and USFWS, in accordance with MOUs, when applying mitigation for wildlife and before waiving, allowing exceptions to, or modifying wildlife-related land use restrictions and mitigation.

Record #	Goal/Obj.	Decisions
WL-4006	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2	Provide, to the extent possible, suitable habitat and forage to support wildlife population objectives as defined by WGFD. BLM will cooperatively consider proposals by the WGFD to change population objective levels based on habitat capability and availability.
WL-4007	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2	Manage access to protect crucial habitats in cooperation with WGFD and other stakeholders.
WL-4008	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2 BR:9.4	Utilize current research, management and conservation plans, and similar related documents to guide wildlife habitat management.
WL-4009	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2 BR:9.4	Construct new fences to avoid adverse impacts to wildlife and in accordance with BLM Fencing Handbook 1741-1 (BLM 1989) and WO Instruction Memorandum 2010-022: Managing Structures for the Safety of Sage-grouse, Sharp-tailed grouse, and Lesser prairie chicken (BLM 2009b).
WL-4010	BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.6 BR:8.1 BR:8.3 BR:8.4 BR:9.4	Work cooperatively with the WGFD augmentation and/or reintroduction programs for acceptable wildlife species within suitable habitats.

Record #	Goal/Obj.	Decisions
WL-4011	BR:7.3 BR:7.5 BR:7.6	Promote the maintenance and improvement of habitat for migratory bird species of conservation concern in a manner consistent with national, regional, and statewide bird conservation priorities.
WL-4012	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2 BR:9.4	Inventory, record, and report existing type, condition, and location of BLM fences. Prioritize fence projects and annually implement modifications in accordance with appropriate wildlife needs and the BLM Fencing Handbook 1741-1.
WL-4013	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:9.1 BR:9.4	Allow surface-disturbing and disruptive activities to occur throughout the entire life of projects during seasons important for wildlife when wildlife resource objectives can be met.
WL-4014	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.2 BR:9.1	Powerlines (distribution and transmission) will be designed to minimize wildlife related impacts and constructed to the latest APLIC guidance. Prohibit above ground distribution powerlines unless identified in an approved distribution plan.
Big Game		
WL-4015	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.3 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:9.1	Prohibit surface disturbance and occupancy in the Ed O. Taylor, Kerns, Bud Love, and Amsden Creek winter ranges for big game.
WL-4016	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:8.1 BR:9.1	Prohibit surface disturbance and disruptive activity in crucial big game winter range during WGFD specified dates, and in elk calving areas during WGFD specified dates (Map 3-16). Historic uses would be exempted.
WL-4017	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:8.1 BR:9.1	Apply a CSU and TLS stipulation to leases within big game crucial winter range and elk calving areas.

Record #	Goal/Obj.	Decisions
WL-4018	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:8.1 BR:9.1	Require fluid mineral production and byproducts to be piped out of crucial elk winter range and calving areas unless operator proposes an acceptable alternative. (Note: this does not authorize off-lease measurement or comingling.)
WL-4019	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.2 BR:8.4 BR:9.1	Forest management activities shall maintain current amounts of functional crucial elk habitat and hiding cover (Map 3-16).
WL-4020	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1	Maintain and reestablish identified traditional priority travel corridors for big game species. ● Prohibit construction of new travel barriers within 0.5 mile of identified big game priority travel corridors. ● Reduce barriers with cooperation of other agencies. ● Avoid constrictions of big game corridors.
WL-4021	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.4 BR:9.1	Allow above ground facility development within elk crucial winter range and calving areas when population and habitat use objectives can be met. (Note: this does not authorize off-lease measurement or comingling.)
WL-4022	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.4 BR:9.1	Retain 85% of existing security habitat as measured from roads within all elk seasonal ranges. (Excluding Fort Creek, will use amendment decision.)
WL-4023	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.4 BR:9.1	Do not designate a WHMA for the Fortification Creek elk herd. Fortification Creek RMP Amendment (BLM 2011a) management will be carried forward within the Fortification Creek Planning Area (Map 3-36).

Record #	Goal/Obj.	Decisions
WL-4024	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.2 BR:9.1 BR:9.4	Prohibit commercial renewable energy (wind and solar) projects in big game crucial winter range, elk calving areas, and identified big game priority travel corridors (Map 3-16).
Upland Game Birds		
WL-4025	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.4 BR:9.1	1. Avoid surface disturbance or occupancy within 0.25 mile of the perimeter of occupied sharp-tailed grouse leks (Map 3-17), 2. Avoid human activity between 6 p.m. and 8 a.m. from March 15 to May 31 within 0.25 mile of the perimeter of occupied sharp-tailed grouse leks (Map 3-17), and 3. Avoid surface-disturbing activities, geophysical surveys, and organized recreational activities (events) which require a special use permit in potential nesting and early brood-rearing habitat within 2.0 miles of an occupied sharp-tailed grouse lek from April 1 to July 15 (Map 3-17).
WL-4026	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.4 BR:9.1	Apply a CSU stipulation to fluid mineral leases within 0.25 mile of sharp-tailed grouse leks (Map 3-17). Apply a TLS to fluid mineral leases within a 2.0-mile radius of sharp-tailed grouse leks from April 1 through July 15 (Map 3-17).
Raptors		
WL-4027	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:8.1 BR:8.2 BR:9.1	Allow surface disturbance and occupancy within the USFWS Wyoming Ecological Services' recommended spatial buffers for breeding raptors (Appendix Q (p. 633) or http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) when nest productivity would not be harmed (Map 3-18). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS.
WL-4028	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:8.1 BR:8.2 BR:9.1	Apply a CSU stipulation to fluid mineral leases containing active raptor nests using USFWS Wyoming Ecological Services' recommended spatial buffers for breeding raptors (Appendix Q (p. 633) or http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 3-18). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS.

Record #	Goal/Obj.	Decisions
WL-4029	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:8.1 BR:8.2 BR:9.1	Seasonally prohibit surface-disturbing and disruptive activities around active raptor nests using the USFWS Wyoming Ecological Services' recommended spatial buffers and dates for breeding raptors (Appendix Q (p. 633) or http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 3-18). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS.
WL-4030	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:8.1 BR:8.2 BR:9.1	Apply a TLS to fluid mineral leases containing active raptor nests using the USFWS Wyoming Ecological Services' recommended spatial buffers and dates for breeding raptors (Appendix Q (p. 633) or http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 3-18). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS. BLM may coordinate buffer distances with the WGFD and/or the USFWS.

Table 3.17. 4000 BIOLOGICAL RESOURCES (BR) – SPECIAL STATUS SPECIES

GOAL BR:10 Distribution and abundance of all special status species are optimized.		
Objectives:		
BR:10.1 Maintain or enhance special status species plant communities and habitats.		
BR:10.2 Manage BLM-administered lands to maintain or restore populations and habitat consistent with conservation requirements for special status species.		
BR:10.3 Develop effective conservation and cooperative management plans, strategies, and agreements with stakeholders.		
GOAL BR:11 Sustainable sagebrush habitats that provide the quantity, quality, and connectivity that is necessary to maintain sustainable populations of Greater Sage-Grouse and other special status species.		
Objectives:		
BR:11.1 Maintain large patches of high quality interconnected sagebrush habitats, with emphasis on patches occupied by Greater Sage-Grouse.		
BR:11.2 Maintain connectivity between and within sagebrush habitats with emphasis on communities occupied by Greater Sage-Grouse.		
BR:11.3 In all PHMA, the desired condition is to maintain all lands ecologically capable of producing sagebrush (but no less than 70%) with a minimum of 15% sagebrush cover or as consistent with specific ecological site conditions. The attributes necessary to sustain these habitats are described in Interpreting Indicators of Rangeland Health (BLM Tech Ref 1734-6).		
GOAL BR:12 Successful restoration and rehabilitation of potential Greater Sage-Grouse habitat across the planning area.		
Objectives:		
BR:12.1 Reestablish sagebrush corridors, where feasible, between Greater Sage-Grouse occupied habitats.		
BR:12.2 Reconnect large patches of sagebrush habitat with emphasis on reconnecting patches occupied by stronghold and isolated populations of Greater Sage-Grouse.		
Record #	Goal/Obj.	Decisions
Special Status Species Plants		
SS Plants-4001	BR:10.1 BR:10.2	Implement actions set forth in recovery plans, conservation measures, terms and conditions, and appropriate BMPs and reasonable and prudent measures within biological opinions for Threatened and/or Endangered plant species.
SS Plants-4002	BR:10.1 BR:10.2	Allow treatments within habitat for special status plant species and within known populations that are proven to benefit the species.

Record #	Goal/Obj.	Decisions
SS Plants-4003	BR:10.1 BR:10.2	Allow the following within habitat for special status plant species, though not within known populations, where populations could be conserved: • Surface-disturbing activities that could adversely impact special status plant species. • Mineral exploration and development activities. • All motor vehicle use, including uses related to fire suppression and geophysical exploration activities (surveying, etc.). • Use of explosives and blasting. • Placement of water developments, salt and mineral supplements. Where appropriate, establish a site-specific buffer, after predisturbance flowering season surveys have shown species presence or absence.
SS Plants-4004	BR:10.1 BR:10.2 BR:10.3	Require predisturbance flowering season surveys for special status plant species prior to approving any project or activity that may impact the habitat for these species as modeled and surveyed by WYNDD and BLM. Mitigation and monitoring plan to be developed within occupied habitat.
SS Plants-4005	BR:10.1 BR:10.2 BR:10.3	Allow aerial application of narrow spectrum herbicide treatments within areas containing special status plant species.
SS Plants-4006	BR:10.1 BR:10.2 BR:10.3	Allow the use of fire suppression chemicals, including foaming agents and surfactants, within areas of known special status plant populations where consistent with the biology of the plant or where human safety or property are at risk and for the protection of special status plant communities that are at risk of being lost by fire.
SS Plants-4007	BR:10.1 BR:10.2	Allow ROW within areas containing habitat for special status species plants, though not within areas of known populations.
SS Plants-4008	BR:10.1 BR:10.2	Apply a CSU stipulation to fluid mineral leases within habitat for special status plant species. Require necessary survey and establish site specific buffer. Apply an NSO stipulation to fluid mineral leases within known special status plant populations.
SS Plants-4009	BR:10.1 BR:10.2	Manage livestock grazing to protect special status plant populations where there is an identified conflict (exclosures, timing).
Special Status Species Fish		
SS Fish-4001	BR:10.2	Modify projects that may affect special status species fish to protect these species. Consult with the USFWS in such cases, as required by the ESA.
SS Fish-4002	BR:10.1 BR:10.2 BR:10.3	Assist authorized agencies in the restoration, reintroduction, augmentation or reestablishment of special status species populations and habitats.
SS Fish-4003	BR:10.1 BR:10.2	Prioritize special status fish species over other fish species in planning and management actions.
SS Fish-4004	BR:10.1 BR:10.2	Implement actions set forth in recovery plans, conservation measures, terms and conditions, and appropriate BMPs and reasonable and prudent measures within biological opinions for Threatened and/or Endangered fish species.
SS Fish-4005	BR:10.3	Support WGFD in obtaining water rights for the benefit of special status fish habitat.
SS Fish-4006	BR:10.1 BR:10.2	Restore or improve important stream segments for special status fish.

Record #	Goal/Obj.	Decisions
SS Fish-4007	BR:10.2	Prohibit new surface-disturbing activities within 0.25 mile of any waters containing special status fish species (Map 3-15), unless it benefits the species. Exceptions must demonstrate the proposed impacts cannot be avoided and the proposal is the least environmentally damaging alternative.
SS Fish-4008	BR:10.2	Apply an NSO stipulation within 0.25 mile of any waters containing special status fish species.
SS Fish-4009	BR:10.1 BR:10.2	All new surface-disturbing activities within 0.25 mile of any waters containing special status fish species (Map 3-15) must demonstrate that the proposed action will benefit the species or will be the least environmentally damaging alternative.
Special Status Species Wildlife		
SS WL-4001	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:12.1 BR:12.2	Utilize current research, management and conservation plans, and similar related documents to guide special status species habitat management.
SS WL-4002	BR:10.3	Implement actions set forth in recovery plans, conservation measures, terms and conditions, protection measures, and appropriate BMPs and reasonable and prudent measures within biological opinions for Threatened and/or Endangered wildlife species, including those specific to this RMP and any future statewide programmatic biological opinions.
SS WL-4003	BR:10.1 BR:10.2 BR:11.1 BR:11.2 BR:12.1 BR:12.2	Maintain (size and quality) or enhance current habitat utilized by special status species. Enlarge/restore habitat on a site-specific basis.
SS WL-4004	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:12.1 BR:12.2	Maintain or enhance the integrity of identified special status wildlife species migration corridors. Manage identified special status wildlife species travel corridors consistent with other resource values.
SS WL-4005	BR:10.2 BR:10.3	Locate and manage facilities to mitigate noise impacts on special status species.
SS WL-4006	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Manage surface-disturbing and disruptive activities to mitigate impacts on special status wildlife species and their habitats.

Record #	Goal/Obj.	Decisions
SS WL-4007	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Apply a CSU stipulation to fluid mineral leases containing special status species habitat. Surveys required for clearance.
SS WL-4008	BR:10.1 BR:10.2 BR:10.3	Allow surface-disturbing and disruptive activities within active prairie dog colonies on BLM surface that do not adversely impact suitable habitat for special status species dependent upon prairie dog colonies (Map 3-19).
SS WL-4009	BR:10.1 BR:10.2 BR:10.3	Apply a CSU stipulation to fluid mineral leases containing active prairie dog colonies.
Upland Game Birds		
SS WL-4010	BR:10.1 BR:10.2 BR:10.3	The BLM will coordinate new recommendations, mitigation, and Greater Sage-Grouse habitat objectives and management considerations with the WGFD and other appropriate agencies, local government cooperators, and the Wyoming SGIT. These measures will be analyzed in site-specific NEPA documents, as necessary. The Greater Sage-Grouse adaptive management plan (Appendix D (p. 325)) provides regulatory assurance that unintended negative impacts to Greater Sage-Grouse habitat will be addressed before consequences become severe or irreversible. Projects requiring an EIS shall develop adaptive management strategies in support of the population management objectives for Greater Sage-Grouse set by the State of Wyoming (State of WY EO 2015-4). Adaptive management triggers are essential for identifying when potential management changes are needed in order to continue meeting Greater Sage-Grouse conservation objectives. With respect to Greater Sage-Grouse, all regulatory entities in Wyoming, including the BLM, use soft and hard triggers. Soft and hard triggers are focused on three metrics: (1) number of active leks, (2) acres of available habitat, and (3) population trends based on annual lek counts. Soft Triggers Response: Soft triggers require immediate monitoring and surveillance to determine causal factors and may require curtailment of activities in the short- or long-term, as allowed by law. The project level adaptive management strategies will identify appropriate responses where the project's activities are identified as the causal factor. The management agency (BLM) and the Adaptive Management Working Group will implement an appropriate response strategy to address causal factors not attributable to a specific project or to make adjustments at a larger regional or statewide level. Hard Trigger Response: Upon determination that a hard trigger has been tripped, the BLM will immediately defer issuance of discretionary authorizations for new actions within the Biologically Significant Unit for a period of 90 days. In addition, within 14 days of a determination that a hard trigger has been tripped, the Adaptive Management Working Group will convene to develop an interim response strategy and initiate an assessment to determine the causal factor or factors (hereafter called the causal factor assessment).

Record #	Goal/Obj.	Decisions
SS WL-4011	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Develop avoidance areas restricting the application of broad-spectrum pesticides in areas containing Greater Sage-Grouse nesting and brood-rearing habitats.
SS WL-4012	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:12.1 BR:12.2	Restore Greater Sage-Grouse brood-rearing habitats in wetland/riparian areas. Maintain seeps, springs, wet meadows, and riparian vegetation in a functional and diverse condition for young Greater Sage-Grouse and other species that depend on forbs and insects associated with these areas.
SS WL-4013	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:12.1 BR:12.2	Manage vegetation composition, diversity and structure, as determined by ecological site description and WGFD protocols, to achieve Greater Sage-Grouse habitat management objectives, in cooperation with stakeholders. Vegetation treatments in nesting and wintering habitat that would reduce sagebrush canopy cover to less than 15% would not be conducted unless it can be shown to be beneficial to Greater Sage-Grouse habitat and removal of sagebrush canopy cover below 15% will be subject to the DDCT. For vegetation treatments in sagebrush within PHMAs, refer to Appendix A, WGFD Protocols for Treating Sagebrush to Benefit Sage-Grouse (WGFD 2011, as updated). These recommended protocols, subject to seasonal conditions of approval, would be used in determining whether proposed treatment constitutes a “disturbance” that would contribute toward the 5% threshold for habitat maintenance. Additionally, these protocols would be used to determine whether the proposed treatment configuration would be expected to have neutral or beneficial impacts for PHMA (core only) populations or if they represent additional habitat loss or fragmentation. Treatments to enhance sagebrush/grasslands habitat for Greater Sage-Grouse would be evaluated based upon habitat quality and the functionality/use of treated habitats post-treatment. The BLM would work collaboratively with partners at the state and local level to maintain and enhance Greater Sage-Grouse habitats. Seasonal restrictions would be applied, as needed, for implementing fuels management treatments according to the type of seasonal habitat present. Wildland fire burns will be treated as disturbance if sagebrush is reduced below 5% canopy cover, unless there is an implementation plan outlining restoration efforts and 3 years of data showing a trend back to suitable habitat. Burned areas within PHMAs would be restored to suitable habitat with consideration given to ESDs, reference sites, site potential and local variability.

Record #	Goal/Obj.	Decisions
SS WL-4014	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Minimize disturbances that would result in alterations to springs and riparian Greater Sage-Grouse habitat. In coordination with stakeholders, develop alternative water sources to replace natural sources that have been affected or destroyed.
SS WL-4015	BR:10.1 BR:10.2 BR:10.3	Manage stored water to control mosquitoes and prevent the spread of WNV to Greater Sage-Grouse.
SS WL-4016	BR:10.1 BR:10.2 BR:10.3	Design water facilities with protective features to reduce mortality of Greater Sage-Grouse from drowning or entrapment.
SS WL-4017	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Design and locate fences to reduce impacts to important Greater Sage-Grouse habitat.
SS WL-4018	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Use the Fire Management Plan to incorporate the most current sagebrush habitat information and to guide fire suppression priorities in sagebrush habitats.
SS WL-4019	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Remove conifers where they have encroached upon Greater Sage-Grouse habitat in cooperation with stakeholders. Reduce the density of conifers that have encroached into, but do not yet dominate sagebrush plant communities.
SS WL-4020	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Inventory, record, and report existing type and condition of BLM fences. Prioritize areas and annually implement modifications to existing fences to reduce hazards to flying Greater Sage-Grouse, in cooperation with stakeholders. All new fences, in priority areas, will be properly designed and located to avoid hazards to flying Greater Sage-Grouse.
SS WL-4021	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Avoid renewable energy (solar and wind) projects in Greater Sage-Grouse Core Population Areas unless it can be demonstrated that the activity would not result in declines of core Greater Sage-Grouse populations. Sufficient demonstration of “no declines” should be coordinated with the WGFD and USFWS.

Record #	Goal/Obj.	Decisions
SS WL-4022	BR:10.1 BR:10.2 BR:10.3	Powerlines (distribution and transmission) will be designed to minimize wildlife related impacts. This action includes but is not limited to: • Avoid areas of high avian use such as water bodies (including ponds, lakes, rivers, streams and wetlands), ridge tops, prairie dog colonies, Greater Sage-Grouse Core Population and Core Population Connectivity Corridors, and sharp-tailed grouse leks (PRB Final EIS, EO 2011-05). • Prohibit above ground distribution powerlines unless identified in an approved distribution plan. • <u>PHMA:</u> ○ New transmission lines greater than 115 kV in PHMA (core only) would be allowed only: (1) when located within 0.5 mile or less of an existing 115 kV or greater transmission line or constructed prior to 2008; or (2) in designated RMP corridors authorized for aboveground transmission lines. Transmission lines routed using one or more of the two criteria listed above will not be counted against the DDCT 5% disturbance cap. New transmission lines greater than 115 kV proposed outside of these areas would be considered where it can be demonstrated that declines in Greater Sage-Grouse populations could be avoided through project design and/or mitigation. These projects will be subject to the density and disturbance restrictions for PHMA. Construction of new transmission lines will adhere to the restrictions associated with conducting activities within PHMAs. Review of transmission line proposals would incorporate the Framework for Sage-grouse Impacts Analysis for Interstate Transmission Lines and other appropriate documents consistent with the three routing criteria described above. ○ New electric distribution lines (less than 115 kV) would be buried where feasible and economically feasible. If not economically feasible, distribution lines may be authorized when effectively designed/mitigated to protect Greater Sage-Grouse and the authorized officer determines that overhead installation is the action alternative with the fewest adverse impacts while still meeting the project need. Agricultural and residential lines will be considered to be adequately mitigated for Greater Sage-Grouse if constructed at least 0.6 mile from the lek perimeter with appropriate timing constraints and constructed to the latest APLIC guidance. These ROW authorizations will be subject to approval by the State Director. Within GHMA: Within general Greater Sage-Grouse habitat (outside core population and connectivity areas) overhead powerlines will be located at least 0.5 mile from occupied Greater Sage-Grouse leks (modified from PRB Final EIS). Any new powerlines authorized within the above identified areas will be buried or if overhead then constructed to the latest APLIC guidance (modified from PRB Final EIS). ○ New pipelines through PHMA would be allowed: (1) within an RMP corridor currently authorized for that use or designated through future RMP amendments; or (2) constructed in or adjacent to existing utilities (buried and above-ground) or roads. Pipelines constructed in RMP corridors or adjacent to existing utilities or roads will require completion of a DDCT analysis for baseline data collection but the project is not required to meet the threshold of 5%. However, within 6 months of the completion of construction, the project proponent will provide the authorized officer with as-built drawings so that total disturbance within core area can be calculated annually. PHMA is designated as avoidance areas for high voltage transmission line and pipeline ROWs. All authorizations must comply with the conservation measures outlined in this approved plan, including the RDFs and avoidance criteria presented in Appendix C (p. 285) of this document.

Record #	Goal/Obj.	Decisions
SS WL-4023	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Lease fluid minerals dependent upon lease location and habitat suitability. Ensure that leasing activities in PHMA comply with Greater Sage-Grouse RMP decisions and remain in compliance with laws, regulations and policy.
SS WL-4024	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Apply the following stipulations to fluid mineral leases within Greater Sage-Grouse Core Population Areas: • NSO prohibiting surface occupancy and disturbing activities, within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). • CSU within Greater Sage-Grouse Core Population Areas ○ In Greater Sage-Grouse core population areas, the density of disturbance of a facility (oil and gas or mining) would be limited to an average of one site per square mile (640 acres) within the DDCT, subject to valid existing rights and applicable law. The one location and cumulative value of existing disturbances will not exceed 5% of suitable habitat of the DDCT area using the DDCT process. Inside Greater Sage-Grouse (priority habitat) core population areas, all suitable habitat disturbed (any program area) will not exceed 5% of suitable habitat within the DDCT area using the DDCT process. ○ Design and manage facilities to prevent WNV transmission. ○ Locate new Local or Collector roads (as defined in BLM Manual 9113) greater than 1.9 miles from the perimeter of occupied Greater Sage-Grouse leks. Locate new roads greater than 0.6 mile from the perimeter of occupied Greater Sage-Grouse leks. ○ Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. • TLS prohibiting surface-disturbing and/or disruptive activities from March 15 to June 30 (independent of habitat suitability). Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case-by-case basis. Where credible data support different timeframes for this seasonal restriction, dates may be adjusted by up to 14 days prior to or subsequent to the above dates. • TLS prohibiting surface-disturbing and disruptive activities within mapped Greater Sage-Grouse winter concentration areas, from December 1 to March 14. Activities in unsuitable habitats within PHMAs would be evaluated under the exception and modification criteria and could be allowed on a case-by-case basis. Where credible data support different timeframes for this seasonal restriction, dates may be adjusted by up to 14 days prior to or subsequent to the above dates.

Record #	Goal/Obj.	Decisions
		Apply the following stipulations to fluid mineral leases within Greater Sage-Grouse Core Population Connectivity Corridors: ● NSO prohibiting surface occupancy and disturbing activities, within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). ● CSU within Greater Sage-Grouse Population Connectivity Corridors. ○ Inside Greater Sage-Grouse (priority habitat) core population area connectivity corridors, all suitable habitat disturbed (any program area) will not exceed 5% of suitable habitat within the DDCT area using the DDCT process. ○ Design and manage facilities to prevent WNV transmission. ○ Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. ● TLS prohibiting surface-disturbing and/or disruptive activities within 4.0 miles of an occupied Greater Sage-Grouse lek, from March 15 to June 30 (independent of habitat suitability and restricted to within Population Connectivity Corridors). Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case by case basis. Where credible data support different timeframes for this seasonal restriction, dates may be adjusted by up to 14 days prior to or subsequent to the above dates. ● TLS prohibiting surface-disturbing and/or disruptive activities within mapped Greater Sage-Grouse winter concentration areas, from December 1 to March 14. Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case by case basis. Where credible data support different timeframes for this seasonal restriction, dates may be adjusted by up to 14 days prior to or subsequent to the above dates.

Record #	Goal/Obj.	Decisions
		Apply the following stipulations to fluid mineral leases within Greater Sage-Grouse habitat outside of Core Population Areas and Core Population Connectivity Corridors: • NSO prohibiting surface occupancy and disturbing activities, within 0.25 mile of the perimeter of occupied Greater Sage-Grouse leks. • CSU within 0.25 mile of occupied Greater Sage-Grouse leks. ◦ Design and manage facilities to prevent WNV transmission. • CSU – Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. Recommend for all surface-disturbing activities on BLM surface adjacent to Core or Connectivity Population Areas, or within or adjacent to lands involved in Greater Sage-Grouse conservation projects. • TLS prohibiting surface-disturbing and disruptive activities within 2.0 miles of occupied Greater Sage-Grouse leks, from March 15 to June 30 (independent of habitat suitability). Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case by case basis. Where credible data support different timeframes for this seasonal restriction, dates may be adjusted by up to 14 days prior to or subsequent to the above dates. • TLS protecting mapped winter concentration areas, from December 1 to March 14, in GHMA would be implemented only where winter concentration areas are identified as supporting biologically significant numbers of Greater Sage-Grouse nesting in PHMA and/or attending leks within PHMA (core only). Appropriate seasonal timing restrictions and habitat protection measures would be considered and evaluated in consultation with the WGFD in all identified winter concentration areas. Where credible data support different timeframes for this seasonal restriction, dates may be adjusted by up to 14 days prior to or subsequent to the above dates. In cases where federal oil and gas leases are or have been issued without stipulated restrictions or requirements that are later found to be necessary, or with stipulated restrictions or requirements later found to be insufficient, consider their inclusion before approving subsequent exploration and development activities. Include these restrictions or requirements only as reasonable measures or as conditions of approval in authorizing APDs or Master Development Plans. Conversely, in cases where leases are or have been issued with stipulated restrictions or requirements that are later found to be excessive or unnecessary, the stipulated restrictions or requirements may be appropriately modified, excepted or waived in authorizing actions. Both the application of reasonable measures or COAs and the modification or exception of stipulated restrictions or requirements must first be based upon site-specific analysis including the necessary supporting NEPA. Note (PHMA and GHMA): The authorized officer may grant an exception if an environmental record of review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavioral needs of Greater Sage-Grouse.

Record #	Goal/Obj.	Decisions
SS WL-4025	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Manage Greater Sage-Grouse Core Population Areas as follows (Map 3-20): ● Prohibit surface-disturbing activities and occupancy within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). ● In Greater Sage-Grouse core population areas, the density of disturbance of a facility (oil and gas or mining) would be limited to an average of one site per square mile (640 acres) within the DDCT, subject to valid existing rights and applicable law. The one location and cumulative value of existing disturbances will not exceed 5 percent of suitable habitat of the DDCT area using the DDCT process. ● Inside Greater Sage-Grouse (priority habitat) core population areas and connectivity corridors, all suitable habitat disturbed (any program area) will not exceed 5% of suitable habitat within the DDCT area using the DDCT process. ○ Design and manage facilities to prevent WNV transmission. ○ New project noise levels, either individual or cumulative, should not exceed 10 dBA (as measured by L50) above baseline noise at the perimeter of the lek from 6:00 pm to 8:00 am during the breeding season (March 1- May 15). Specific noise protocols for measurement and implementation will be developed as additional research and information emerges. ○ Locate new Local or Collector roads (as defined in BLM Manual 9113) greater than 1.9 miles from the perimeter of occupied Greater Sage-Grouse leks. Locate new Resource roads greater than 0.6 mile from the perimeter of occupied Greater Sage-Grouse leks. ○ Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. ● Prohibit surface-disturbing and disruptive activities from March 15 to June 30 (independent of habitat suitability). Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case by case basis. Where credible data support different timeframes for this seasonal restriction, dates may be adjusted by up to 14 days prior to or subsequent to the above dates. ● Prohibit surface-disturbing and disruptive activities within mapped Greater Sage-Grouse winter concentration areas, from December 1 to March 14. Activities in unsuitable habitats within PHMAs would be evaluated under the exception and modification criteria and could be allowed on a case-by-case basis. Where credible data support different timeframes for this seasonal restriction, dates may be adjusted by up to 14 days prior to or subsequent to the above dates.

Record #	Goal/Obj.	Decisions
		To the extent necessary to prevent unnecessary or undue degradation, manage as follows within Greater Sage-Grouse Core Population Connectivity Corridors: ● Prohibit surface occupancy and disturbing activities, within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). ● In Greater Sage-Grouse Core Population Connectivity Corridors, subject to valid existing rights and applicable law, the cumulative value of existing disturbances will not exceed 5% of suitable habitat of the DDCT area using the DDCT process. Inside Greater Sage-Grouse (priority habitat) core population areas and connectivity corridors, all suitable habitat disturbed (any program area) will not exceed 5% of suitable habitat within the DDCT area using the DDCT process. ○ Design and manage facilities to prevent WNV transmission. ○ Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. ● Prohibit surface-disturbing and disruptive activities within 4.0 miles of occupied Greater Sage-Grouse leks from March 15 to June 30 (independent of habitat suitability and restricted to within Population Connectivity Areas). Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case by case basis. Where credible data support different timeframes for this seasonal restriction, dates may be adjusted by up to 14 days prior to or subsequent to the above dates. ● Prohibit surface-disturbing and disruptive activities within mapped Greater Sage-Grouse winter concentration areas, from December 1 to March 14. Activities in unsuitable habitats within PHMAs would be evaluated under the exception and modification criteria and could be allowed on a case-by-case basis. Where credible data support different timeframes for this seasonal restriction, dates may be adjusted by up to 14 days prior to or subsequent to the above dates.

Record #	Goal/Obj.	Decisions
		Manage as follows within occupied Greater Sage-Grouse habitat outside of Core Population and Core Population Connectivity Corridors: • Prohibit or restrict surface occupancy and disturbing activities within 0.25 mile of the perimeter of occupied Greater Sage-Grouse leks. • Reduce surface disturbance for authorizations within 0.25 mile of occupied Greater Sage-Grouse leks by: ◦ Design and manage facilities to prevent WNV transmission. • Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. Recommend for all surface-disturbing activities on BLM surface adjacent to core or connectivity population areas, within or adjacent to lands involved in Greater Sage-Grouse conservation projects. BLM parcels less than 640 acres that only meet the population density factor may be excluded. • Prohibit surface-disturbing and/or disruptive activities within 2.0 miles of occupied Greater Sage-Grouse leks, from March 15 to June 30 (independent of habitat suitability). Activities in unsuitable habitats would be evaluated under the exception and modification criteria and could be allowed on a case by case basis. Where credible data support different timeframes for this seasonal restriction, dates may be adjusted by up to 14 days prior to or subsequent to the above dates. • Protect mapped winter concentration areas, from December 1 to March 14, in GHMA would be implemented only where winter concentration areas are identified as supporting biologically significant numbers of Greater Sage-Grouse nesting in PHMA and/or attending leks within PHMA (core only). Appropriate seasonal timing restrictions and habitat protection measures would be considered and evaluated in consultation with the WGFD in all identified winter concentration areas. Where credible data support different timeframes for this seasonal restriction, dates may be adjusted by up to 14 days prior to or subsequent to the above dates. Note (PHMA and GHMA): The authorized officer may grant an exception if an environmental record of review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavioral needs of Greater Sage-Grouse.
Raptors		
SS WL-4026	BR:10.1 BR:10.2 BR:10.3	Establish a year-round disturbance-free buffer zone of at least 0.5 mile for known active bald eagle nests. Establish a 1.0-mile limited activity zone for known active nests (February 1 to August 15) (Map 3-21).
SS WL-4027	BR:10.1 BR:10.2 BR:10.3	Establish a year-round disturbance-free buffer zone of at least 0.5 mile for consistently used bald or golden eagle winter roosts and the following riparian corridors consistently used by bald eagles: Clear Creek, Crazy Woman Creek, Piney Creek, Powder River, and Tongue River. The stipulation area may be adjusted to 1.0 mile based on topographic features, visibility, disturbance and human activity levels, and other factors. This buffer zone restriction will be based on site specific information and BLM may coordinate with the USFWS. Additionally, apply a 1.0-mile limited activity TLS for consistently used roosts and the identified riparian corridors (November 1 to April 1). The buffer zone restriction will be based on site-specific information and BLM may coordinate with the USFWS.

Record #	Goal/Obj.	Decisions
SS WL-4028	BR:10.1 BR:10.2 BR:10.3	Apply an NSO stipulation to fluid mineral leases within 0.5 mile of consistently used bald or golden eagle winter roosts and the following riparian corridors consistently used by bald eagles: Clear Creek, Crazy Woman Creek, Piney Creek, Powder River, and Tongue River. The stipulation area may be adjusted to 1.0 mile based on topographic features, visibility, disturbance and human activity levels, and other factors. This buffer zone restriction will be based on site specific information and BLM may coordinate with the USFWS. Additionally, apply a 1.0-mile limited activity TLS for consistently used roosts and the identified riparian corridors (November 1 to April 1). The buffer zone restriction will be based on site-specific information and BLM may coordinate with the USFWS.
SS WL-4029	BR:10.1 BR:10.2 BR:10.3	Seasonally prohibit surface-disturbing and disruptive activities to nesting raptors using USFWS Wyoming Ecological Services' recommended spatial buffers and dates for breeding raptors (Appendix Q (p. 633) or http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 3-18). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS.
SS WL-4030	BR:10.1 BR:10.2 BR:10.3	Prohibit surface disturbance, disruptive activities, and occupancy around active nests of special status raptor species within a species specific biologic buffer zone using USFWS Wyoming Ecological Services' recommended spatial buffers for breeding raptors (Appendix Q (p. 633) or http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 3-18). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS.
SS WL-4031	BR:10.1 BR:10.2 BR:10.3	Apply a TLS to mineral leases containing nests of active special status raptor species using USFWS Wyoming Ecological Services' recommended spatial buffers and dates for breeding raptors (Appendix Q (p. 633) or http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 3-18). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS.
SS WL-4032	BR:10.1 BR:10.2 BR:10.3	Apply an NSO stipulation to fluid mineral leases containing active nests of special status raptor species within a species specific biologic buffer zone using USFWS Wyoming Ecological Services' recommended spatial buffers for breeding raptors (Appendix Q (p. 633) or http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 3-18). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS. BLM may coordinate buffer distances with the WGFD and/or the USFWS.
Amphibians, Reptiles, and Bats		

Record #	Goal/Obj.	Decisions
SS WL-4033	BR:10.1 BR:10.2 BR:10.3	Require surveys for special status amphibian, reptile, and bat species prior to approving any project or activity that may impact the habitat for these species. This habitat includes: perennial waters, vernal pools, playas, wetlands, and south-facing rock outcrops. Allow surface-disturbing and disruptive activities, where special status amphibian, reptile, and bat species occur: (1) areas within 1,640 feet (500 meters) of perennial waters, vernal pools, playas, and wetlands, and (2) within 1,640 feet (500 meters) of south-facing rock outcrops when populations and habitat can be conserved.
SS WL-4034	BR:10.1 BR:10.2 BR:10.3	Require surveys for special status amphibian, reptile, and bat species prior to approving any project or activity that may impact the habitat for these species. This habitat includes: perennial waters, vernal pools, playas, wetlands, and south-facing rock outcrops. Apply a CSU stipulation to fluid mineral leases for the protection of special status amphibian, reptile, and bat species and their habitats where special status species occur: (1) areas within 1,640 feet (500 meters) of perennial waters, vernal pools, playas, and wetlands, and (2) within 1,640 feet (500 meters) of south-facing rock outcrops.

Table 3.18. 5000 HERITAGE AND VISUAL RESOURCES (HR) – CULTURAL RESOURCES

GOAL HR:1 Stewardship and appreciation of cultural resources is promoted. Objectives: HR:1.1 In compliance with NAGPRA, maintain and enhance programs that provide opportunities for scientific research of cultural resources. HR:1.2 Develop a public outreach and education program to instill a preservation ethic in the public regarding archeological and historic resources. HR:1.3 Develop and maintain interpretation of cultural resources in areas of high public interest. HR:1.4 Enhance public experience through interpretive facilities and support of heritage tourism. GOAL HR:2 Native American sacred sites are preserved and protected. Objectives: HR:2.1 In coordination with tribes, identify Native American sacred sites. HR:2.2 In coordination with tribes and other stakeholders, provide for tribal access to known sacred sites. HR:2.3 Consult with Native Americans to identify resource types or places that may be impacted by BLM actions. HR:2.4 Maximize opportunities for cooperation with tribal governments for managing cultural resources and public education. GOAL HR:3 National Register eligible and unevaluated cultural resources are protected. Objectives: HR:3.1 Identify cultural resources by defining priority geographic areas for new field inventory, based on the probability for unrecorded significant cultural resources. HR:3.2 In cooperation with stakeholders, develop and implement activity plans for significant cultural resources.
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GOAL HR:4 Cultural resources are identified, preserved, and protected, while remaining available for appropriate uses by present and future generations.

Objectives:

HR:4.1 Manage each type of cultural resource according to their proper use allocation, and monitor their condition and use.

HR:4.2 Develop activity plans for special areas or historic properties identified as high risk for adverse impacts.

HR:4.3 Recruit site stewards to assist with monitoring the condition of sites important to national heritage.

GOAL HR:5 Select historic properties are managed for long-term heritage and educational values and to enhance the public experience.

Objectives:

HR:5.1 Maintain compatible recreational use with the historic values of these historic properties.

HR:5.2 Maintain the setting for those contributing trail segments, battlefield sites, forts, and other historic properties for which setting is an important aspect of site integrity, by utilizing viewshed management tools.

HR:5.3 Maximize partnership and cooperative management opportunities.

Record #	Goal/Obj.	Decisions
Cultural-5001	HR:3.2 HR:4.2 HR:4.3	Complete site stabilization and long-term protection for significant sites that are experiencing adverse impacts.
Cultural-5002	HR:1.1 HR:2.1 HR:2.2 HR:2.3 HR:2.4	Maintain existing relationships and develop new relationships with Native American tribes to identify sites, areas, and resources important to them. Document and keep confidential sites, areas, and resources that necessitate protection. Incorporate the information obtained from the tribes into planning decisions. Manage identified areas of tribal importance to minimize disturbance.
Cultural-5003	HR:2.1 HR:2.2 HR:2.3 HR:2.4	Ensure areas of importance to Native American tribes are not transferred from federal ownership.
Cultural-5004	HR:1.1 HR:1.2 HR:1.3 HR:1.4	Establish site stewardship opportunities in coordination with stakeholders for appropriate sites.
Cultural-5005	HR:1.3 HR:3.2 HR:4.1 HR:4.2	Develop CRPPs for the protection and preservation of the following geographic areas in cooperation with stakeholders: • Pumpkin Buttes • Sites Associated with Red Cloud's War and the Great Sioux War (including Dull Knife Battlefield, Cantonment Reno, Crazy Woman Battle, Bozeman Trail) • South Big Horn Mountains

Record #	Goal/Obj.	Decisions
Cultural-5006	HR:4.1 HR:5.1 HR:5.2	Apply NSO stipulations to fluid mineral leases containing the following historic properties (Map 3-22): ● Pumpkin Buttes ● Cantonment Reno ● Dull Knife Battle ● Crazy Woman Battle ● Contributing and Unevaluated Segments of the Bozeman Trail ● All Rock Art Sites ● All Rock Shelter Sites ● All Native American Burials Apply CSU stipulations (surface disturbance and infrastructure must either not be visible, or will result in a weak contrast) to protect the setting within 3.0 miles of the following sites: ● Pumpkin Buttes ● Cantonment Reno ● Dull Knife Battle ● Crazy Woman Battle ● Contributing and Unevaluated Segments of the Bozeman Trail ● All Rock Art Sites ● All Native American Burials
Cultural-5007	HR:3.1 HR:4.1	Prohibit surface disturbance within the following sites: ● Pumpkin Buttes ● Cantonment Reno ● Dull Knife Battle ● Crazy Woman Battle ● Contributing and Unevaluated Segments of the Bozeman Trail ● All Rock Art Sites ● All Rock Shelter Sites ● All Native American Burials Allow surface disturbance and infrastructure within 3.0 miles of the following sites where development is either not visible, or will result in a weak contrast to the setting: ● Pumpkin Buttes ● Cantonment Reno ● Dull Knife Battle ● Crazy Woman Battle ● Contributing and Unevaluated Segments of the Bozeman Trail ● All Rock Art Sites ● All Native American Burials

Record #	Goal/Obj.	Decisions
Cultural-5008	HR:2.1 HR: 2.3 HR:2.4 HR:3.1 HR:4.1	Require archeological monitors for projects in accordance to developed strategy. Require Native American monitoring for surface-disturbing federal undertakings in accordance with agreements or on a project-specific basis.
Cultural-5009	HR:1.1 HR:2.1 HR:2.2 HR:2.4	Establish programmatic agreements with interested tribes.
Cultural-5010	HR:2.1 HR:2.3 HR:2.4	Establish agreements that provide tribal access to the Pumpkin Buttes and any other TCPs or sacred sites on BLM-administered surface, in coordination with stakeholders.
Cultural-5011	HR:2.3 HR:2.4	Mitigate adverse effects to sensitive sites such as TCPs and/or sacred sites through appropriate prohibitions and measures to protect setting. Allow mineral leasing in areas containing sensitive sites such as TCPs and/or sacred sites. Mitigate through appropriate stipulations such as NSO, CSU, surface occupancy prohibitions or measures to protect setting.

Table 3.19. 5000 HERITAGE AND VISUAL RESOURCES (HR) – PALEONTOLOGICAL RESOURCES

GOAL HR:6 Paleontological resources are preserved and protected.		
Objectives:		
HR:6.1 Reduce threats to paleontological resources from natural or human-caused deterioration.		
HR:6.2 Implement proper assessment procedures for all surface-disturbing activities on public lands, split estate, and under all federal actions.		
GOAL HR:7 Paleontological resources are appreciated and scientific knowledge of paleontological resources promoted.		
Objectives:		
HR:7.1 Provide paleontological research opportunities for qualified scientists/academia.		
HR:7.2 Manage select paleontological sites for their educational value and to enhance the public experience.		
Record #	Goal/Obj.	Decisions
Paleo-5001	HR:6.1 HR:6.2	Retain public lands with significant paleontological values (Map 3-23).
Paleo-5002	HR:6.1 HR:6.2	Require paleontological field surveys on PFYC Class 4 and 5 formations potentially affected by proposed activities and Class 3 formations as needed. Require monitoring of surface-disturbing activities based on survey results.
Paleo-5003	HR:6.1 HR:6.2	Do not identify specific casual collection areas.
Paleo-5004	HR:7.1	Evaluate and establish cooperative agreements and partnerships with researchers, museums or other institutions where appropriate; BLM initiated or as requested by proponents.
Paleo-5005	HR:6.1 HR:6.2 HR:7.2	Designate areas containing paleontological resources of high quality or importance for special management, as they are identified.
Paleo-5006	HR:6.1 HR:6.2	Avoid areas containing paleontological resources of high quality or importance when developing locatable minerals.
Paleo-5007	HR:6.1 HR:6.2	Apply an NSO stipulation to mineral leases in areas containing paleontological resources of high quality or importance.
Paleo-5008	HR:6.1 HR:6.2	Avoid areas containing paleontological resources of high quality or importance when developing salable minerals.

Table 3.20. 5000 HERITAGE AND VISUAL RESOURCES (HR) – VISUAL RESOURCES

GOAL HR:8 The scenic (visual) quality of BLM-administered lands are maintained.		
Objectives:		
HR:8.1 Perform VRI and update VRM management classes.		
HR:8.2 Manage each VRM class according to the definitions in the VRM manual (H-8410-1).		
Record #	Goal/Obj.	Decisions
VRM-5001	HR:8.2	Manage WSAs under VRM Class I objectives. Any facilities or structures proposed in WSAs will be designed so as not to impair wilderness suitability. If the Middle Fork Powder River is designated by Congress as a Wild and Scenic River, the river will be managed as VRM Class I.
VRM-5002	HR:8.2	Incorporate BMPs for visual resources into project planning for federal actions.
VRM-5003	HR:8.1 HR:8.2	Manage areas rated as VRI Class IV that do not contain special emphasis areas as VRM Class IV. Manage areas that were not rated during the VRI that contain BLM-administered surface to match the surrounding VRM classification.
VRM-5004	HR:8.2	Require non-temporary facilities and structures to be screened, painted, and designed to blend with the surrounding landscape except where safety indicates otherwise.
VRM-5005	HR:8.1 HR:8.2	Manage VRI Class II areas (except the Powder River Breaks, Fortification Creek, and northwestern portion of the Main Powder River VRI rating units) and special emphasis areas as VRM Class II (Map 3-24). Special emphasis areas will include: SRMAs, designated ACECs, and lands with wilderness characteristics units.
VRM-5006	HR:8.1 HR:8.2	Manage all VRI Class III areas, plus the Powder River Breaks, Fortification Creek, and northwestern portion of the Main Powder River VRI rating units (outside of special emphasis areas) as VRM Class III (Map 3-24).
VRM-5007	HR:8.2	Complete a visual simulation and mitigation design for all proposed actions within VRM Classes I and II. Visual simulation and mitigation design may be required on a project-specific basis within VRM Class III areas with high visual sensitivity.

Table 3.21. 6000 LAND RESOURCES (LR) – FOREST PRODUCTS

GOAL LR:1 Healthy forests and woodlands are available to provide a variety of products for consumptive use.		
Objectives:		
LR:1.1 Provide for diverse social and economic outputs in a fair, balanced, efficient, and ecologically sustainable manner.		
LR:1.2 Manage forests and woodlands to provide a diversity of forest products.		
LR:1.3 Cooperation with stakeholders in the utilization of silviculture and land management while implementing Wyoming Forestry BMPs.		
Record #	Goal/Obj.	Decisions
FP-6001	LR:1.1	Prohibit forest management activities within 200 feet of surface waters.
FP-6002	LR:1.1 LR:1.2	Allow the sale of permits to meet the public demand for personal use of forest products consistent with wildlife habitat objectives and other resource values.
FP-6003	LR:1.1 LR:1.2	Offer an array of forest products from forest and woodlands throughout the planning area in accordance with other resource values (Map 3-25).
FP-6004	LR:1.1 LR:1.2	Manage forest product sales to remain within ecologically sustainable limits while maximizing economic return.
FP-6005	LR:1.3	Require the contractor and/or partner involved in commercial sales to take responsibility for acquiring access when needed for forest management purposes. BLM will negotiate and procure access when needed. (BLM driven project or commercial sale.)
FP-6006	LR:1.1	Design/shape forest management areas to have meandering boundaries, follow topography, avoid natural barriers, and in accordance with other resource values and within the limits of the Wyoming Forestry BMPs and other guidance without limiting the harvest area size.
FP-6007	LR:1.1 LR:1.2	Protect forest regeneration areas that are being damaged or in an area where damage is probable.
FP-6008	LR:1.1 LR:1.2	Evaluate forest management areas and their successional dynamics, and where necessary implement tactics to assure regeneration (forest sustainability).
FP-6009	LR:1.1 LR:1.2	Utilize pre-commercial thinning and other silvicultural practices to create healthy and economically sustainable forest stands consistent with other resource values.

Table 3.22. 6000 LAND RESOURCES (LR) – LANDS AND REALTY

GOAL LR:2 Manage land tenure adjustments and land use authorizations to meet the needs of the customers while protecting other resource values.		
Objectives:		
LR:2.1 Develop and maintain a land-ownership pattern that improves access for public use, and improves management and protection of BLM-administered lands by:		
1. Acquiring legal easements to BLM-administered lands for recreational opportunities and administrative use. 2. Responding to requests for land authorizations for access needs. 3. Responding to requests for land transfers. 4. Giving priority to land exchanges and/or sales on custodial grazing allotments while supporting other resource values.		
LR:2.2 Through consolidation and disposal, the overall result should be no net acreage gain during the life of the RMP.		
LR:2.3 Effects of infrastructure projects, including siting, will be minimized using the best available science, updated as monitoring information on current infrastructure projects becomes available.		
Record #	Goal/Obj.	Decisions
L&R-6001	LR:2.1	Consider R&PP applications on a project-specific basis. Prohibit subsequent uses on these lands unless they are compatible with each R&PP authorization.
L&R-6002	LR:2.1	Consider land use authorizations (permits, leases, etc.) on a project-specific basis consistent with other resource objectives.
L&R-6003	LR:2.1	Consider withdrawals for surface and/or minerals on a project-specific basis.
L&R-6004	LR:2.1	Review withdrawal proposals from other agencies on a project-specific basis.
L&R-6005	LR:2.1 LR:2.2	Lands meeting the identified disposal criteria will have priority consideration for disposal.
L&R-6006	LR:2.1	Avoid the potential of inadvertent trespass by people accessing public lands through the use of appropriate signage and access authorizations.
L&R-6007	LR:2.1	Review existing withdrawals on a case-by-case basis. Determine whether the use is consistent with the intent of the withdrawal and whether the withdrawal should be continued, modified, revoked or terminated.
L&R-6008	LR:2.1	Any land becoming unencumbered by withdrawals will be managed in a manner consistent with adjacent or comparable public land within the planning area.
L&R-6009	LR:2.1	Review existing classification and segregations on a case-by-case basis to determine whether classification and segregation is appropriate and should be continued, modified or terminated.
L&R-6010	LR:2.1	Land on which a classification or segregation has been terminated will be managed in a manner consistent with adjacent or comparable public land within the planning area.
L&R-6011	LR:2.1	Acquire private or state land or interest in land from willing sellers consistent with other resource objectives, on a project-specific basis.

Record #	Goal/Obj.	Decisions
L&R-6012	LR:2.1	Acquire and dispose of land based on all resource values, including but not limited to agricultural potential and water. Do not classify, open, or make available any BLM-administered public lands within the planning area for agricultural leasing or agricultural entry under either Desert Land Entry or Indian Allotment for one or more of the following reasons: rugged topography, presence of sensitive resources, lack of water or access, small parcel size, and/or unsuitable soils. Lands classified as PHMA and GHMA for Greater Sage-Grouse will be retained in federal management unless: (1) the agency can demonstrate that disposal of the lands, including land exchanges, will provide a net conservation gain to the Greater Sage-Grouse or (2) the agency can demonstrate that the disposal, including land exchanges, of the lands will have no direct or indirect adverse impact on conservation of the Greater Sage-Grouse. Exceptions would be considered where there is mixed ownership and land exchanges would allow for additional or more contiguous federal ownership patterns within PHMA. For PHMA with minority federal ownership, an additional, effective mitigation agreement would be included for any disposal of federal land. As a final preservation measure, consideration should be given to pursuing a permanent conservation easement. For lands in GHMA that are identified for disposal, the BLM will only dispose of such lands consistent with the goals and objectives of this plan, including, but not limited to, the land use plan goal to conserve, recover, and enhance Greater Sage-Grouse habitat on a landscape scale.
L&R-6013	LR:2.2	Actively pursue a program to dispose of BLM surface lands identified for disposal including other lands not identified but meeting appropriate disposal criteria (Map 3-26) (Appendix R (p. 639)). These areas have priority consideration for exchange, public sale, or transfer of jurisdiction to another agency, subject to disposal criteria.
L&R-6014	LR:2.2	Prioritize acquiring land or interests in lands in areas adjacent to large blocks of BLM-administered land or other lands having significant resource or other values before other areas.
L&R-6015	LR:2.2	Pursue easements accessing public lands that would benefit any resource value.
L&R-6016	LR:2.2	Pursue land tenure adjustments on lands holding custodial grazing allotments and/or sales, in accordance with other resource values.

Table 3.23. 6000 LAND RESOURCES (LR) – RENEWABLE ENERGY

GOAL LR:3 Renewable energy development consistent with other resource values.		
Objectives:		
LR:3.1 Identify BLM-administered lands that are suitable and not suitable for renewable energy development while supporting other resource values.		
LR:3.2 In cooperation with stakeholders, provide opportunities for scientific research of renewable energy and affected resources.		
Record #	Goal/Obj.	Decisions
RE-6001	LR:3.2	Cooperate with stakeholders to promote opportunities for scientific research for renewable energy in accordance with other resource values.
RE-6002	LR:3.2	Cooperate with stakeholders to coordinate renewable energy opportunities in accordance with other resource values.
RE-6003	LR:3.1	Exclude renewable energy development on 352,068 acres in accordance with management outlined in the Approved RMP. • Southern Big Horn Mountains • Areas closed to mineral leasing (fluid and solid) • Areas recommended for withdrawal to mineral entry (locatable) • Areas closed to mineral material entry (salable) • ROW exclusion areas • Areas within 3.0 miles and visible from historic properties that retain an intact setting • All other areas where surface disturbance is prohibited
RE-6004	LR:3.1	Avoid renewable energy development on 374,518 acres in the following areas (Map 3-27): • Mineral leasing (fluid and solid), NSO, and CSU areas • ROW avoidance areas • Areas greater than 3.0 miles and visible from historic properties that retain an intact setting • All other areas with surface disturbance restrictions Renewable energy development would be avoided in Greater Sage-Grouse priority habitat (Core Population Areas and Core Population Connectivity Corridors), unless it can be sufficiently demonstrated that the development activity would not result in declines of Greater Sage-Grouse priority populations. Sufficient demonstration of “no declines” should be coordinated with the WGFD and USFWS.

Table 3.24. 6000 LAND RESOURCES (LR) – RIGHTS-OF-WAY AND CORRIDORS

GOAL LR:4 Primary infrastructure corridors and subsidiary routes consistent with other resource values.		
Objectives:		
LR:4.1 Manage public lands to meet the needs of ROW customers while supporting other resource values.		
LR:4.2 Maintain and acquire access routes across non public lands to meet resource management and use objectives.		
LR:4.3 Identify infrastructure corridors consistent with other resource values.		
LR:4.4 Make opportunities available for exploration and development of CO ₂ sequestration research and activities, while avoiding or mitigating impacts of these activities on other resource values.		
LR:4.5 Effects of infrastructure projects, including siting, will be minimized using the best available science, updated as monitoring information on current infrastructure projects becomes available.		
Record #	Goal/Obj.	Decisions
ROW-6001	LR:4.3 LR:4.5	Designate corridors for major ROW to minimize surface disturbance and impacts to other resources.
ROW-6002	LR:4.2	Provide reasonable access across public land to private land, subject to other resource values.
ROW-6003	LR:4.1 LR:4.5	Develop communication site management plans for all existing and newly identified communication site concentration areas.
ROW-6004	LR:4.3 LR:4.5	The preferred location for new ROW will be in or adjacent to existing disturbed areas associated with existing ROW, constructed roads, or highways.
ROW-6005	LR:4.2	Maintain a transportation management system in cooperation with appropriate state and local agencies to meet public and resource management needs.
ROW-6006	LR:4.1 LR:4.5	Make lands available for ROW in accordance with management identified within the Approved RMP to conserve other resources (Map 3-29). This results in: • 79,777 acres excluded from ROW. • 321,149 acres identified for ROW avoidance. PHMA would be managed as ROW avoidance areas for new ROW or SUA permits. Within PHMA where new ROWs/SUAs are necessary, new ROWs/SUAs would be located within designated RMP corridors or adjacent to existing ROWs/SUAs where technically feasible. Subject to valid existing rights including non-federal land inholdings, required new ROWs/SUAs would be located adjacent to existing ROWs/SUAs or where it best minimizes Greater Sage-Grouse impacts. Greater Sage-Grouse priority habitat (Core Population Areas and Core Population Connectivity Corridors) are designated as avoidance areas for ROWs. • 381,176 acres are open for ROW development.
ROW-6007	LR:4.1 LR:4.5	Manage authorizations for communication sites in the Pumpkin Buttes area for the protection of cultural and visual resources. New authorizations would be limited to existing towers. Prohibit communication sites on North Middle Butte.

Record #	Goal/Obj.	Decisions
ROW-6008	LR:4.1 LR:4.5	Identify and designate communication concentration areas. Evaluate proposals outside designated concentration areas and co-locate sites where feasible.
ROW-6009	LR:4.1 LR:4.5	Designate the following corridors for major ROW transportation and utility use (Map 3-28), in cooperation with the State of Wyoming: ● Echeta Road ● Sheridan to Gillette, largely following US 14/16 ● Highway 59 north of Gillette ● Interstate 25 ● Interstate 90, Gillette to Montana State Line ● Powder River ● Powder River Breaks (Buffalo to Gillette) Corridor use is required. No above ground lines will be authorized in the Powder River or Powder River Breaks corridors. Corridor requirements within Greater Sage-Grouse habitat are identified in SS WL-4022.
ROW-6010	LR:4.1 LR:4.5	Authorize and place above ground facilities (i.e., compressors, electric distribution powerlines) within ROW and other disturbance areas when resource objectives can be met.
ROW-6011	LR:4.1 LR:4.5	Avoid ROW on slopes 25% or greater and highly erodible soils.
ROW-6012	LR:4.4	Evaluate CO ₂ sequestration proposals where in accordance with management identified within the Approved RMP.

Table 3.25. 6000 LAND RESOURCES (LR) – TRAVEL AND TRANSPORTATION MANAGEMENT

GOAL LR:5 A safe transportation network that supports other resource values.		
Objectives:		
LR:5.1 Utilize a comprehensive travel management approach to sustain and enhance access, recreational experiences, and support other resource values.		
LR:5.2 Maintain an inventory of the road and trail system.		
LR:5.3 Designate all BLM-administered lands as Open, Limited, or Closed to OHV use, in consideration of other resource values.		
LR:5.4 Provide for acceptable modes of legal public access that supports other resources, reduces conflicts, and provides for diverse recreation opportunities.		
GOAL LR:6 Opportunities for safe and enjoyable OHV use are provided while supporting other resource values.		
Objectives:		
LR:6.1 Assess OHV demand and plan for and balance the demand for OHV use with other uses.		
LR:6.2 Manage OHV use to conserve soil functionality, vegetative cover, watershed health, and other resource values.		
LR:6.3 Manage OHV use in partnership with stakeholders.		
Record #	Goal/Obj.	Decisions
Trans-6001	LR:5.4	Negotiate access across non-BLM-administered lands to isolated public land parcels from willing landowners.
Trans-6002	LR:5.1 LR:5.4	Evaluate roads constructed under other initiatives (e.g., oil and gas exploration) for inclusion in the BLM transportation system. Roads that are no longer needed for their original purposes are assessed for addition to the BLM transportation system prior to reclamation.
Trans-6003	LR:5.1	Require maintenance of all designated routes to meet or exceed BLM standards according to the road classification (i.e., road, primitive road, trail) assigned in FAMS.
Trans-6004	LR:5.1	Design, construct, and maintain roads or trails based on the specific objectives for that trail or road in consideration of other resources. Design, construct, and maintain roads to minimize surface disturbance, changes to surface water runoff, and erosion.
Trans-6005	LR:5.1 LR:5.4	All motorized use, except emergency response, will be subject to the Open, Closed and Limited OHV area designations, unless specifically addressed in an authorization or otherwise approved by the authorized officer.
Trans-6006	LR:5.1 LR:5.4	Base road or trail closures and abandonments on resource protection, demand for new roads, and accommodation of authorized uses.
Trans-6007	LR:5.4 LR:6.1 LR:6.2 LR:6.3	Maintain transportation system roads under BLM jurisdiction in accordance with assigned maintenance levels and in consideration of other resource values. Maintain administrative roads on an as needed basis, dependent on time, funding, and access priorities.

Record #	Goal/Obj.	Decisions
Trans-6008	LR:5.2	Within 5 years of the ROD, inventory all routes on public land and develop a travel management plan to classify and designate routes for continued use or decommissioning and reclamation. Include maintenance standards for routes to be retained for public use, as well as specific measures to accomplish road closure in the travel management plan. Inventory, designate, number, and sign all routes as appropriate. Posted signs will include allowed uses and activities. Restrictions to existing roads and trails remains in effect until travel management planning is completed and designated routes are identified. Appendix S (p. 667) provides additional information regarding the travel management planning process.
Trans-6009	LR:5.1 LR:6.3	Establish TMAs for locations receiving intensive use or areas where resource damage is imminent.
Trans-6010	LR:5.3	Restrict OHV use to signed roads in areas limited to designated roads and trails.
Trans-6011	LR:5.1 LR:5.4	Consider ways to allow motorized access for people with disabilities under section 504 of the Rehabilitation Act of 1973.
Trans-6012	LR:5.4	Identify areas appropriate for providing access for people with disabilities for recreational activities. Prioritize trails appropriate for upgrades that make them ADA compliant.
Trans-6013	LR:5.1 LR:5.3	Allow temporary closures to motorized vehicle use in areas that pose public health and safety risks, and/or where resource damage is imminent. In Greater Sage-Grouse priority habitat (Core Population Areas and Core Population Connectivity Corridors) and general habitat, temporary closures will be considered in accordance with 43 CFR subpart 8364 (Closures and Restrictions); 43 CFR subpart 8351 (Designated National Area); 43 CFR subpart 6302 (Use of Wilderness Areas, Prohibited Acts, and Penalties); 43 CFR subpart 8341 (Conditions of Use). Temporary closure or restriction orders under these authorities are enacted at the discretion of the authorized officer to resolve management conflicts and protect persons, property, and public lands and resources. Where an authorized officer determines that OHVs are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources, the affected areas shall be immediately closed to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence (43 CFR 8341.2). A closure or restriction order should be considered only after other management strategies and alternatives have been explored. The duration of temporary closure or restriction orders should be limited to 24 months or less; however, certain situations may require longer closures and/or iterative temporary closures. This may include closure of routes or areas.
Trans-6014	LR:5.3	Limit OHV use to designated routes unless compelling reasons exist to classify parcels as Open or Closed, and is consistent with other resource values. Until individual routes are designated, areas subject to route designation will be classified as Limited to existing routes (Map 3-30). Once route designation is completed, areas will no longer be classified as Limited to existing routes.
Trans-6015	LR:5.1 LR:5.2 LR:5.4 LR:6.1	Consider nominations from the public for appropriate OHV use areas, consistent with other resource values.
Trans-6016	LR:5.1 LR:5.3 LR:6.1 LR:6.2	Prohibit motorized travel if damage to vegetation, soils, or water quality would result.
Trans-6017	LR:6.2	Allow OHV use only on designated routes within stock driveways for the general public and in additional areas within stock driveways and rests under a trailing permit.
Trans-6018	LR:6.2	Allow over-the-snow vehicle use consistent with OHV use designations when snow cover is sufficient to prevent resource damage.

Record #	Goal/Obj.	Decisions
Trans-6019	LR:6.2	Limit motorized vehicle use to designated routes within habitat of special status species consistent with travel management designations for that area. Routes will be designated to avoid occupied habitat during travel management planning.
Trans-6020	LR:5.1 LR:5.4	Evaluate existing routes in the vicinity of any new system roads for closure and reclamation consistent with other resource values.
Trans-6021	LR:5.3	Close areas to motorized vehicle use to protect sensitive resources as defined in the corresponding special designation and resource sections of the Approved RMP (37,389 acres) and in addition include (Map 3-31): • Wilderness Study Areas • Lands with wilderness characteristics identified for special management • Middle Fork Canyon • Cantonment Reno • Dry Creek Petrified Tree EEA • A 500-foot buffer of designated nonmotorized trails
Trans-6022	LR:5.3	Limit motorized vehicle travel to designated roads and trails in 661,729 acres, consistent with other resource values in the Approved RMP (Map 3-31).
Trans-6023	LR:5.3	Protect wintering big game by seasonally prohibiting motorized vehicle use within big game crucial winter ranges in accordance with WGFD recommendations (presently November 15 or December 1 to April 30) (Map 3-31).
Trans-6024	LR:5.3	Protect big game by seasonally prohibiting motorized vehicle use within big game calving areas in accordance with WGFD recommendations (presently May 1 to June 30).
Trans-6025	LR:5.1 LR:5.3 LR:6.2	Allow motorized travel not causing resource damage to go up to 300 feet off designated routes for dispersed camping and game retrieval, where consistent with travel management designations in defined areas (activities under administrative permits excluded) (Map 3-30).

Table 3.26. 6000 LAND RESOURCES (LR) – RECREATION

GOAL LR:7 Diverse recreational opportunities are provided.		
Objectives:		
LR:7.1 Manage SRMAs and ERMA's in partnership with stakeholders.		
LR:7.2 Manage recreation to protect resources, maintain public health and safety, and to provide a diverse array of benefits to the public.		
LR:7.3 Manage recreation opportunities to maintain a minimal level of user conflict.		
GOAL LR:8 Recreation facilities balance public demand with other resource values.		
Objective:		
LR:8.1 Design and maintain recreation sites to meet acceptable health and safety standards while supporting other resource values.		
GOAL LR:9 Awareness, education, and support for BFO recreation programs and opportunities.		
Objective:		
LR:9.1 Emphasize and support collaborative public outreach.		
Record #	Goal/Obj.	Decisions
Rec-6001	LR:7.1 LR:7.2	Develop or revise RAMPs for the SRMAs and ERMA's as public demand and management needs dictate.
Rec-6002	LR:7.2	Allow casual use of the public land for hiking, bicycling, hunting, fishing, camping and similar uses.
Rec-6003	LR:7.2 LR:8.1 LR:9.1	Open the planning area to dispersed recreation where consistent with other resource values.
Rec-6004	LR:9.1	Provide general and interpretive information as well as information designed to prevent trespass to visitors of SRMAs and other high-use recreation areas.
Rec-6005	LR:8.1	Maintain existing facilities consistent with the recreational setting.
Rec-6006	LR:7.2	Provide diverse recreational opportunities in cooperation with a variety of user groups.
Rec-6007	LR:9.1	Work with state, local groups, and adjacent landowners to identify and develop recreational facilities and trails and to improve public access to public lands.
Rec-6008	LR:7.2 LR:8.1	Design any new recreation facilities within a SRMA to be ADA compliant. Upgrade existing recreation facilities to be ADA compliant as time and funding allow.
Rec-6009	LR:7.2	Pursue access to public lands for recreational purposes.
Rec-6010	LR:7.2	Avoid riparian habitat or develop and manage recreational sites, recreation facilities, and recreational access in a manner that minimizes impacts to riparian habitats.
Rec-6011	LR:7.2	Prohibit dispersed camping and commercial camps within 200 feet of perennial surface water.
Rec-6012	LR:7.2	Manage access to caves for recreationists under a Cave Management Plan.

Record #	Goal/Obj.	Decisions
Rec-6013	LR:7.2	Use the best available technology to minimize noise and light pollution potentially affecting recreation facilities and sites.
Rec-6014	LR:7.2	Close developed recreation sites such as picnic areas, campgrounds, and environmental education areas to livestock grazing.
Rec-6015	LR:7.3 LR:8.1	Allow additional recreation facilities in areas where they are supported by recreational use and are consistent with other resource values. Construction of recreation facilities within Greater Sage-Grouse PHMA (Core Population Areas and Core Population Connectivity Corridors) must conform with the avoidance and minimization measures of this plan. If it is determined that these conservation measures are inadequate for the conservation of Greater Sage-Grouse, the BLM will require and ensure compensatory mitigation that provides a net conservation gain to the species.
Rec-6016	LR:7.2 LR:7.3	Allow camping for no more than 14 days within any 28 consecutive days. After reaching this time limit, the visitor must relocate to another site at least 1.0 mile away.
Rec-6017	LR:7.1	Divide the planning area into the following ERMA (Map 3-32): ● Cabin Canyon (1,369 acres): Includes lands adjacent to State of Wyoming lands north of Bishop Road. ● Face of the Bighorns/North Fork ERMA (34,477 acres): Includes lands from the Poison Creek Trail area south along the Face of the Bighorns, the Horn, and the North Fork WSA. ● Gardner Mountain ERMA (55,181 acres): Includes lands along and south of the Mayoworth-Slip Road and north of Barnum Mountain Road. ● Kaycee Stockrest ERMA (2,685 acres) ● North Bighorns ERMA (2,926 acres): Includes parcels in Sheridan County adjacent to the Bighorn National Forest. ● Powder River Basin ERMA (224,483 acres): This ERMA includes the public lands in the planning area with reasonable public access of sufficient size to support recreation that are not included in the other ERMA or SRMAs. ● Southern Bighorns ERMA (25,535 acres): Lands in southwestern Johnson County adjacent to the Middle Fork Powder River and Hole-in-the-Wall SRMAs. ● Walk-in Area ERMA (3,007 acres): Includes BLM-administered lands adjacent to WGFD walk-in areas not designated in another SRMA or ERMA. Strategically emphasize a variety of recreation opportunities along with the protection of natural and cultural resources. R&VS management will be recognized as an important affected resource in ERMA. ERMA will be managed to allow continued recreation opportunities and to protect RSCs in concert with other resource values or uses.

Record #	Goal/Obj.	Decisions
Rec-6018	LR:7.1	Designate the following areas as SRMAs and delineate discrete recreation management zone boundaries (Map 3-32): ● Burnt Hollow (17,280 acres) ● Dry Creek Petrified Tree (2,567 acres) ● Hole-in-the-Wall (11,952 acres) ● Middle Fork Powder River (10,083 acres) ● Mosier Gulch (1,026 acres) ● Welch Ranch (1,748 acres) ● Weston Hills (9,504 acres) Strategically emphasize a variety of recreation opportunities along with the protection of natural and cultural resources. R&VS management will be recognized as the predominant land use focus in SRMAs. Manage SRMAs under site-specific management plans. Site-specific management plans will be consistent with and implement the provisions specified for SRMAs in Appendix T (p. 679).
Rec-6019	LR:7.1 LR:7.2 LR:8.1	Do not lease minerals within the boundary of the following SRMAs: ● Burnt Hollow (17,280 acres) ● Dry Creek Petrified Tree (2,567 acres) ● Hole-in-the-Wall (11,952 acres) ● Middle Fork Powder River (10,083 acres) ● Mosier Gulch (1,026 acres) ● Welch Ranch (1,748 acres) Lease fluid minerals with a CSU stipulation to be consistent with SRMA management in the following SRMA: ● Weston Hills (9,504 acres)
Rec-6020	LR:7.1 LR:7.2 LR:8.1	Do not institute a mineral leasing buffer surrounding SRMAs.
Rec-6021	LR:7.1 LR:7.2 LR:8.1	Allow surface disturbance within designated SRMAs for administrative use only, where consistent with other resource values.
Rec-6022	LR:7.1 LR:7.2 LR:8.1	Recommend withdrawals from mineral entry under the mining laws in designated SRMAs.
Rec-6023	LR:7.1 LR:7.2 LR:8.1	Allow salable mineral development within designated SRMAs for administrative use only.

Record #	Goal/Obj.	Decisions
Rec-6024	LR:7.2 LR:7.3	Evaluate fees for access to eligible areas, as allowed by the Federal Lands Recreation Enhancement Act, when resource condition and/or documented public desire for expanded services are warranted.
Rec-6025	LR:7.2 LR:7.3 LR 8.1	Close the following areas to recreational target shooting, to protect natural and cultural resources, promote human health and safety, and reduce user conflicts: ● Burnt Hollow (17,280 acres) ● Welch Ranch (1,748 acres) <i>Note: All developed recreation sites (including trailheads, picnic areas, etc.) are closed to target shooting per 43 CFR 8365.2-5(a).</i> Establish RMA standards and indicators, monitor recreational target shooting, and increase education and enforcement of target shooting regulations in the following RMAs: ● Cabin Canyon (1,369 acres) ● Dry Creek Petrified Tree (2,567 acres) ● Hole-in-the-Wall (11,952 acres) ● Kaycee Stockrest ERMA (2,685 acres) ● Middle Fork Powder River (10,083 acres) ● Mosier Gulch (1,026 acres) ● Walk-in Area ERMA (3,007 acres): Includes BLM-administered lands adjacent to WGFD walk-in areas not designated in another SRMA or ERMA. ● Weston Hills (9,504 acres) Establish partnerships with shooting sports advocacy organizations or other interested agencies or organizations to accommodate opportunities for shooting sports on public lands, where consistent with other resource values.

Table 3.27. 6000 LAND RESOURCES (LR) – LANDS WITH WILDERNESS CHARACTERISTICS

GOAL LR:10 All lands that have wilderness characteristics have been identified, evaluated, and management determined.		
Objectives:		
LR:10.1 Assess all BLM-administered lands for potential areas containing wilderness characteristics.		
LR:10.2 Inventory areas identified as possessing wilderness characteristics and determine appropriate management.		
Record #	Goal/Obj.	Decisions
LWC-6001	LR:10.1 LR:10.2	Evaluate newly acquired lands, and other parcels meeting the size and naturalness requirements for wilderness characteristics.
LWC-6002	LR:10.2	Manage lands with wilderness characteristics (Map 3-34) to emphasize ecosystem health, natural values, and primitive recreational opportunities (6,864 acres). The lands with wilderness characteristics area will be managed to protect wilderness characteristics. Management would include: • Closing the area to motorized use • Managing for visual resources as Class II • Leasing fluid minerals with a NSO stipulation with no exceptions, modifications or waivers • Recommending withdrawal to locatable mineral entry • Closing the areas to salable mineral development • Excluding ROW • Prohibiting renewable energy development • Prohibiting commercial woodcutting unless it is a byproduct of an environmental restoration effort • Prohibiting all other surface-disturbing activities not compatible with retaining or enhancing the area's natural values

Table 3.28. 6000 LAND RESOURCES (LR) – LIVESTOCK GRAZING MANAGEMENT

GOAL LR:11 Public rangelands provide for a sustainable level of livestock grazing consistent with other resource values and sustained yield.		
Objectives:		
LR:11.1 Continue livestock grazing on available BLM-administered lands.		
LR:11.2 Manage forage to maintain or improve ecological states and achieve and/or maintain Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming.		
LR:11.3 Monitor and evaluate rangeland health and condition in coordination with cooperators, and lessees to determine if, and what additional management is needed to achieve desired ecological state.		
LR:11.4 Emphasize the use of mechanical, chemical, and biological methods, as well as fire and livestock grazing to achieve desired ecological state.		
LR:11.5 Continue the existence and use of stock driveways and other stock driveway withdrawals.		
LR:11.6 Identify and implement opportunities for vegetation improvements to increase the number of AUMs available for livestock grazing to support and sustain the economies of local communities.		
LR:11.7 Create and maintain reserve common allotments or pastures for temporary grazing purposes to facilitate another allotment in attaining management objectives.		
LR:11.8 In coordination with cooperators and lessees develop and implement allotment management plans, where feasible. Emphasis to be placed on Category I allotments.		
Record #	Goal/Obj.	Decisions
Grazing-6001	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.7 LR:11.8	Develop and implement appropriate livestock grazing management actions to achieve the Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming, to provide watershed protection, to improve forage for livestock, forage and habitat for wildlife, and enhance rangeland health.
Grazing-6002	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.8	Continue to authorize appropriate amounts, kinds, and seasons of use. Forage allocations in grazing leases can be adjusted when supported by monitoring, field observations, rangeland health standards assessment/evaluation results or other data acceptable to the authorized officer. Category C allotments have a low priority, Category M allotments have a medium priority, and Category I allotments have a high priority for monitoring and funding of range improvement projects.
Grazing-6003	LR:11.1 LR:11.3 LR:11.8	Continue the M, C, and I allotment categorization designations (Map 3-33) (Appendix U (p. 725)).
Grazing-6004	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.8	Continue implementation of existing AMPs. Develop and implement new AMPs with grazing lessees and other stakeholders to achieve desired resource goals and objectives.
Grazing-6005	LR:11.1 LR:11.2 LR:11.3 LR:11.8	Manage livestock grazing to sustain riparian, wetland, mountain mahogany, specials status species or other special habitats.

Record #	Goal/Obj.	Decisions
Grazing-6006	LR:11.1 LR:11.2 LR:11.3	Manage Category C allotments (Appendix U (p. 725)) to continue authorized livestock use.
Grazing-6007	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.7 LR:11.8	Construct reservoirs, wells, troughs, and pipelines to provide water to disperse grazing use. The grazing lessee or other cooperator will be required to maintain water in troughs located on public land during the frost-free period (April through October) for wildlife.
Grazing-6008	LR:11.1 LR:11.5	Retain designated stock driveways and livestock trails. Consider any stock driveway designation change on a project-specific basis and analyze through an environmental assessment.
Grazing-6009	LR:11.1 LR:11.2 LR:11.3 LR:11.7 LR:11.8	Implement strategies that best protect rangeland resources during periods of drought. Cooperate with stakeholders for voluntary adjustments in livestock use and/or livestock management.
Grazing-6010	LR:11.2 LR:11.4	Rest prescribed burn areas from livestock grazing prior to treatment when necessary to increase or maintain fuels for burning.
Grazing-6011	LR:11.2 LR:11.3 LR:11.4	Authorize OHV travel for maintaining range improvements and animal husbandry activities by the grazing lessee and his/her agent, consistent with other management actions, as long as resource damage does not occur or new routes created.
Grazing-6012	LR:11.2 LR:11.4	Avoid creating concentrations of livestock in areas of known eligible and unevaluated cultural sites. (salt blocks, water source)
Grazing-6013	LR:11.1 LR:11.3	Restoration treatments may include actions to reduce or eliminate potential grazing impacts to meet regeneration objectives following forest management.
Grazing-6014	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6	Manage Category M allotments (Appendix U (p. 725)) to achieve multiple resource health and objectives.
Grazing-6015	LR:11.1 LR:11.2 LR:11.6	Develop range improvements in accordance with resource needs and livestock management.
Grazing-6016	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.8	Conduct baseline inventories. Develop, implement, and monitor AMPs. Base AMP goals/objectives in Category I and M allotments on resource protection and watershed health.

Record #	Goal/Obj.	Decisions
Grazing-6017	LR:11.1 LR:11.2 LR:11.3 LR:11.7	Allow livestock grazing on all public lands in the planning area except where an evaluation has determined it to be incompatible with other resource uses or values (campgrounds, entrances of caves, sites of cultural significance). • The BLM will prioritize (1) the review of grazing permits/leases, in particular to determine if modification is necessary prior to renewal, and (2) the processing of grazing permits/leases in Greater Sage-Grouse priority habitat (Core Population Areas and Core Population Connectivity Corridors) followed by general habitat. In setting workload priorities, precedence will be given to existing permits/leases in these areas not meeting Land Health Standards, with focus on those containing riparian areas, including wet meadows. The BLM may use other criteria for prioritization to respond to urgent natural resource concerns (e.g., fire) and legal obligations. • The BLM will collaborate with appropriate federal agencies and the State of Wyoming, as contemplated under the Wyoming Governor's Executive Order 2013-3, to: (1) develop appropriate conservation objectives; (2) define a framework for evaluating situations where Greater Sage-Grouse conservation objectives are not being achieved on federal land, to determine if a significant causal relationship exists between improper grazing (by wildlife or wild horses or livestock) and Greater Sage-Grouse conservation objectives; and (3) identify appropriate site-based actions to achieve Greater Sage-Grouse conservation objectives within the framework. Absent substantial and compelling information that adjustments are necessary to the core population area strategy, these core population areas, connectivity areas, identified and mapped winter concentration areas, and protective stipulations shall not be altered for a minimum of 7 years. Any changes shall involve a transparent process that provides an opportunity for public input and proper consideration of any proposal consistent with the provisions contemplated under Wyoming's core population area strategy. • The NEPA analysis for renewals and modifications of livestock grazing permits/leases that include lands within PHMAs will include specific management thresholds based on Greater Sage-Grouse Habitat Objectives Table and Land Health Standards (43 CFR 4180.2) and one or more defined responses that will allow the authorizing officer to make adjustments to livestock grazing that have already been subjected to NEPA analysis. • Allotments within priority habitat (Core Population Areas and Core Population Connectivity Corridors), and focusing on those containing riparian areas, including wet meadows, will be prioritized for field checks to help ensure compliance with the terms and conditions of the grazing permits. Field checks could include monitoring for actual use, utilization, and use supervision. • At the time a permittee or lessee voluntarily relinquishes a permit or lease, the BLM will consider whether the public lands where that permitted use was authorized should remain available for livestock grazing or be used for other resource management objectives, such as reserve common allotments or fuel breaks. This does not apply to or impact grazing preference transfers, which are addressed in 43 CFR 4110.2-3. 9,992 acres are incompatible with and 772,110 acres are available for livestock grazing. This does not apply to or impact grazing preference transfers, which are addressed in 43 CFR 4110.2-3.
Grazing-6018	LR:11.1 LR:11.2 LR:11.3 LR:11.6	Permanent forage allocations would consider watershed protection, livestock grazing, wildlife habitat, and other resource values. Increases in vegetative production would be allocated for watershed protection first, then for forage and habitat.
Grazing-6019	LR:11.1 LR:11.3 LR:11.6	Locate livestock salt or mineral supplements a minimum of 500 feet away from water sources, riparian areas, and aspen stands.

Record #	Goal/Obj.	Decisions
Grazing-6020	LR:11.1 LR:11.2 LR:11.4 LR:11.7	Designate and manage future reserve common allotments as needed. Develop management criteria for the reserve common allotments at the time of designation.
Grazing-6021	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.7	Provide rest/deferment from livestock grazing following wildfire, prescribed burns, and other vegetative treatments until resource objectives are met.
Grazing-6022	LR:11.1 LR:11.2 LR:11.3 LR:11.4	Allow increases in livestock stocking rates as a result of vegetation treatments when resource objectives are met.

Table 3.29. 7000 SPECIAL DESIGNATIONS (SD) – AREAS OF CRITICAL ENVIRONMENTAL CONCERN

GOAL SD:1 The integrity of unique resources are protected and opportunities for compatible uses are provided.		
Objectives:		
SD:1.1 Identify areas for potential special designation that contain important scenic, ecological, and/or cultural values that are currently unprotected.		
SD:1.2 Utilize special designations to meet resource protection needs within appropriate geographical areas.		
SD:1.3 Interpret sites of high public interest.		
Record #	Goal/Obj.	Decisions
ACEC-7001	SD:1.2	Evaluate BLM authorized activities and develop mitigation to protect the integrity of the characteristics for which the ACEC was designated.
ACEC-7002	SD:1.3	Develop educational materials describing access and features of ACECs and appropriate use protocols.
ACEC-7003	SD:1.1	Designate the following areas as ACECs (Map 3-34): ● Pumpkin Buttes (1,731 acres) ● Welch Ranch (1,116 acres)
ACEC-7004	SD:1.2	Manage ACECs under site-specific management plans. Site-specific management plans will be consistent with and implement the provisions specified for ACECs in Appendix V (p. 757).

Table 3.30. 7000 SPECIAL DESIGNATIONS (SD) – SCENIC OR NATIONAL BACK COUNTRY BYWAYS

GOAL SD:2 Potential National Byways are evaluated to enhance opportunities for the public to see and enjoy public lands.		
Objectives:		
SD:2.1 Where appropriate, identify scenic or national back country byways and develop management prescriptions to maintain resource values.		
SD:2.2 Promote the increased awareness of historical and cultural values and facilitate a sense of stewardship within proposed national back country byways.		
Record #	Goal/Obj.	Decisions
BCB-7001	SD:2.1	Manage national back country byways with the objective of encouraging responsible use of the proposed byway, while protecting and displaying the scenic, cultural, geological, multiple use, and crucial wildlife habitat values that occur in the area.
BCB-7002	SD:2.2	Coordinate with local residents in the area of any designated national back country byway to develop information and interpretive materials for visitors that highlight multiple uses of public lands and land stewardship in the area.
BCB-7003	SD:2.1	Evaluate roads in coordination with the counties and other stakeholders for designation as National Back Country or Scenic Byways. Eligible routes may be proposed for National Back Country or Scenic Byway designation (Map 3-34). Potential routes include: ● Hazelton Road ● Slip Road ● Trabing/Sussex ● Powder River ● Rome Hill ● Tipperary/Thompson Road

Table 3.31. 7000 SPECIAL DESIGNATIONS (SD) – WILD AND SCENIC RIVERS

GOAL SD:3 Suitable waterway segments’ free-flowing condition, water quality, outstandingly remarkable values, and tentative classification would be protected and/or enhanced until such time that Congress designates the Middle Fork Powder River as a WSR or releases the river for other uses.		
Objectives:		
SD:3.1 Manage suitable segments to protect and enhance their free-flowing condition, water quality, outstandingly remarkable values, and tentative classification.		
SD:3.2 Develop partnerships for managing and promoting suitable waterways to enhance their public enjoyment.		
Record #	Goal/Obj.	Decisions
WSR-7001	SD:3.1	Manage the Middle Fork Powder River (Map 3-35) in accordance with the Middle Fork Interim Management Plan until Congress acts upon the nomination. (The interim management plan and eligibility review report are available on the BFO website, http://www.blm.gov/wy/st/en/programs/Planning/rmps/buffalo/docs.html .)
WSR-7002	SD:3.2	Work with stakeholders to manage the Middle Fork Powder River corridor.
WSR-7003	SD:3.1 SD:3.2	If Congress does not designate the Middle Fork Powder River as a WSR, and releases the river for other uses, management will continue to retain the free-flowing characteristics and outstanding remarkable values.

Table 3.32. 7000 SPECIAL DESIGNATIONS (SD) – WILDERNESS STUDY AREAS

GOAL SD:4 Existing WSAs will meet the “non-impairment standard” under BLM Manual 6330 – Management of Wilderness Study Areas.		
Objectives:		
SD:4.1 Monitor and document condition and use of each WSA at least once per year.		
SD:4.2 Manage and protect the characteristics of each WSA so as to maintain their existing size, naturalness, unique values, and outstanding opportunities.		
Record #	Goal/Obj.	Decisions
WSA-7001	SD:4.2	If Congress acts to either designate as Wilderness or release WSAs from further consideration (Fortification Creek, Gardner Mountain, North Fork) (Map 3-35), the RMP will be amended as necessary.
WSA-7002	SD:4.2	Manage WSAs for the preservation of natural conditions and processes, and to provide opportunities for solitude or a primitive and unconfined type of recreation. Under the guidance of BLM Manual 6330 – Management of Wilderness Study Areas, manage WSAs to emphasize primitive, nonmotorized activities to maintain the current natural values.
WSA-7003	SD:4.2	If Congress decides not to designate a WSA as wilderness, do not lease mineral rights until a plan amendment is completed. Additionally, motorized travel, surface-disturbing activities and any other activities (except valid existing rights) that may impair wilderness characteristics will be prohibited until a plan amendment is completed. WSAs released by Congressional for uses other than wilderness would then be considered pursuant to Manuals 6310 and 6320 to maintain wilderness characteristics.
WSA-7004	SD:4.2	Prohibit all motorized and mechanized equipment within WSAs.

Table 3.33. 8000 SOCIOECONOMIC RESOURCES (SR) – SOCIAL AND ECONOMIC

GOAL SR:1 Opportunities for economic and social sustainability are provided at the national, regional, and local levels. Objectives: SR:1.1 Ensure local and regional economic development and local land use plans are considered in BLM actions. SR:1.2 Consider and address economic impact of BLM actions. SR:1.3 Coordinate and address impacts to the social structure to the extent BLM actions are expected to affect the social structure. SR:1.4 Recognize city and county infrastructure needs associated with BLM actions. GOAL SR:2 Sustainable consumptive economic development opportunities are provided for and are balanced against non-consumptive uses. Objectives: SR:2.1 Identify options to utilize resources consistent with a multiple resource management philosophy that provides a balance between local, regional, and national views. SR:2.2 Maintain a balance between consumptive and nonconsumptive uses. GOAL SR:3 Use conflicts are managed through public education and outreach. Objective: SR:3.1 Work cooperatively with local agencies to foster public awareness.		
Record #	Goal/Obj.	Decisions
Socio-8001	SR:2	Remain sensitive to the economic and social health of the impacted area.
Socio-8002	SR:1	Refer to available socioeconomic monitoring plans that provide indicators for the economic and social health of an affected area.
Socio-8003	SR:1	Manage in a way that considers the fact that BLM actions are integrally connected with both socioeconomics and the cultural health of the planning area.
Socio-8004	SR:1	Quantify socioeconomic impacts associated with site-specific and programmatic BLM actions to the extent possible.
Socio-8005	SR:3	Share the results with state and local governmental officials for the purpose of promoting collaborative management, where possible, to ensure the affected parties and overlapping jurisdictions are provided that information as required by law.
Socio-8006	SR:2	Work with local, state, federal, and private entities with the intention of developing mitigation strategies designed to promote a healthy and sustainable social and economic environment.
Socio-8007	SR:1 SR:3	In consideration of local and regional economic development and land use plans, work cooperatively with all stakeholders to identify the socioeconomic impacts of BLM actions and develop strategies that would mitigate those impacts where possible with the overriding goal of promoting sustainability in a multiple resource use environment.

Table 3.34. 8000 SOCIOECONOMIC RESOURCES (SR) – HEALTH AND SAFETY

GOAL SR:4 Public health and safety are protected.		
Objectives:		
SR:4.1 Reduce or eliminate hazards to human health and safety and the environment by reporting, cleanup, and reclamation of contaminated sites.		
SR:4.2 Integrate environmental protection and hazard management into all BLM actions.		
SR:4.3 Collaborate with Wyoming DEQ to identify, mitigate, or remediate Abandoned Mine Land sites and coalbed fires.		
SR:4.4 Avoid public exposure to H ₂ S.		
SR:4.5 Reduce or eliminate physical hazards through appropriate mitigation.		
Record #	Goal/Obj.	Decisions
Health-8001	SR:4.1 SR:4.2	Identify, report, control, and mitigate imminent and potential hazards or threats to human health and/or the environment from hazardous substance releases and physical hazards.
Health-8002	SR:4.1	Manage the cleanup of hazardous substance and other contaminant spills and releases to reduce human health and/or environmental risk, reclaim and monitor contaminated lands, and carry out emergency response activities.
Health-8003	SR:4.3	Identify and prioritize abandoned mine sites for reclamation that most affect human health or safety, and the environment.
Health-8004	SR:4.4	Require, as appropriate, warning signs, sirens, and public education to prevent exposure by the public to hydrogen sulfide gas associated with oil and gas development and production. Develop and maintain a field office hydrogen sulfide gas safety plan to identify areas of potential hydrogen sulfide gas, appropriate safety distances, and access restrictions, if necessary.
Health-8005	SR:4.5	Ensure appropriate review of BLM-authorized activities and the application of effective management controls to minimize hazardous substance and other contaminant spills, releases, and physical hazards.
Health-8006	SR:4.1 SR:4.5	Reduce waste produced by BLM activities and from authorized uses of public lands through waste minimization practices that promote reducing, reusing, recycling, substituting, and other innovative methods of pollution prevention.
Health-8007	SR:4.3	Identify, monitor, and mitigate hazards to public health and safety from coal seamfires.

Note: NSO, CSU, and TL stipulations identified in the management actions in Table 3.1, “1000 PHYSICAL RESOURCES (PR) – AIR QUALITY (AQ)” (p. 83) through Table 3.34, “8000 SOCIOECONOMIC RESOURCES (SR) – HEALTH AND SAFETY” (p. 157), apply only to fluid mineral leasing.

% Percent	CWPP Community Wildfire	LR Land Resources	ROD Record of Decision
# Number	Protection Plan	LUP Land Use Plan	ROW right-of-way
AAQS Ambient Air Quality Standard	dBa A-weighted decibels	LWC Lands with Wilderness	RSC Recreation Setting Characteristic
ACEC Area of Critical	DDCT Density and Disturbance	Characteristics	SD Special Designations
Environmental Concern	Calculation Tool	M Maintain Allotment	SGIT Sage-Grouse Implementation
ADA Americans with Disabilities Act	DEQ Department of Environmental	MOU Memorandum of Understanding	Team
AMP Allotment Management Plan	Quality	MR Mineral Resources	SIP State Implementation Plan
APD Application for Permit to Drill	DFC Desired Future Condition	N/A Not Applicable	SR Socioeconomic Resources
APHIS Animal and Plant	DOI U.S. Department of the Interior	NAGPRA Native American Graves	SRMA Special Recreation
Health Inspection Service	EEA Environmental Education Area	Protection and Repatriation Act	Management Area
APLIC Avian Power Line Interaction	EIS Environmental Impact Statement	NEPA National Environmental	SS Special Status
Committee	EO Executive Order	Policy Act	SUA Special Use Authorization
AQD Air Quality Division	ERMA Extensive Recreation	NRC Nuclear Regulatory Commission	TCP Traditional Cultural Property
AQ Air Quality	Management Area	NRCS Natural Resources Conservation	TLS Timing Limitation Stipulation
AQRV Air Quality Related Value	ES&R Emergency Stabilization	Service	TMA Travel Management Area
AUM Animal Unit Month	and Rehabilitation	NSO No Surface Occupancy	U.S.C. United States Code
BAER Burn Area Emergency	ESA Endangered Species Act	O&G Oil and Gas	USFWS United States
Rehabilitation	ESD Ecological Site Description	Obj. Objective	Fish and Wildlife Service
BAR Burned Area Rehabilitation	FAMS Facility Asset Management	OHV Off-Highway Vehicle	VRI Visual Resource Inventory
BFO Buffalo Field Office	System	OL Other Leasables	VRM Visual Resource Management
BLM Bureau of Land Management	FM Fire and Fuels Management	PFC Proper Functioning Condition	WGFD Wyoming Game and
BMP Best Management Practice	GHMA General Habitat Management	PFYC Potential Fossil Yield	Fish Department
BR Biological Resources	Area	Classification	WHMA Wildlife Habitat Management
C Custodial Allotment	GS Grassland and Shrubland Resources	PHMA Priority Habitat Management	Area
CBNG Coalbed Natural Gas	H ₂ S Hydrogen Sulfide	Area	WL Wildlife
CFR Code of Federal Regulations	HFRA Healthy Forests Restoration Act	PR Physical Resources	WNv West Nile Virus
CO ₂ Carbon Dioxide	HR Heritage and Visual Resources	PRB Powder River Basin	WO Washington Office
COA Condition of Approval	I Improvement Allotment	R&PP Recreation and Public Purposes	WSA Wilderness Study Area
CRMP Cultural Resources	kV kilovolt	R&VS Recreation and Visitor Services	WSR Wild and Scenic River
Management Plan	L&R Lands and Realty	RAMP Recreation Area Management	WUI Wildland Urban Interface
CRPP Cultural Resource Project Plan	LAC Limit of Acceptable Change	Plan	WY Wyoming
CSU Controlled Surface Use		RDF Required Design Feature	WYNDD Wyoming Natural Diversity
		RE Renewable Energy	Database
		RMA Recreation Management Area	
		RMP Resource Management Plan	

Chapter 4. Consultation, Coordination, and Public Involvement

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Appendix W (p. 763) details the public involvement process, consultation, and coordination conducted for the Approved Resource Management Plan (RMP). This chapter provides a summary of these activities.

4.1. Consultation and Coordination

Cooperating Agency Participation

For the Buffalo RMP revision planning effort, the Bureau of Land Management (BLM) invited local, state, federal, and tribal representatives to participate as cooperating agencies on the Buffalo RMP revision and Environmental Impact Statement (EIS). Cooperating agencies participated in developing the alternatives for the RMP and EIS, provided data and other information related to their agency responsibilities and expertise, commented on administrative drafts of the EIS, and participated in other meetings and teleconferences regarding the revision process. Appendix W (p. 763) includes additional information on cooperating agency engagement and a list of cooperating agencies involved in the Buffalo RMP revision effort.

Endangered Species Act Consultation

On January 5, 2010, in accordance with Section 7 of the Endangered Species Act, the U.S. Fish and Wildlife Service (USFWS) provided a list of threatened and endangered species likely to occur on BLM-administered land in the Buffalo planning area. The USFWS commented on draft documents during the RMP revision process. A copy of the BLM's Final Biological Assessment was included in the Proposed RMP and Final EIS for public review. The USFWS submitted a programmatic Biological Opinion concurring with the BLM effects determinations (Appendix K (p. 443)).

Native American Consultation

In accordance with the Federal Land Policy and Management Act (FLPMA), the National Historic Preservation Act, and BLM policy, the BLM performed outreach and engaged with Native American tribal representatives throughout the RMP planning process. On September 19, 2008, the BLM sent letters inviting Native American tribes to be cooperating agencies as part of the RMP revision. The BLM asked Native American tribes to comment on interests or concerns related to management in the planning area and asked tribes to identify any places of traditional religious or cultural importance within the planning area. In November 2010, May 2011, June 2011, February 2012, May 2012, and June 2012, the BLM met with tribal representatives to discuss the RMP and related tribal concerns. Additional outreach efforts occurred throughout the RMP revision process. The BLM will continue to engage Native American tribes during implementation of the Approved RMP.

Coordination with the Environmental Protection Agency

The BLM coordinated with the Environmental Protection Agency (EPA) throughout the RMP revision process, including during alternatives development. The EPA participated in the RMP revision process as a cooperating agency and provide information related to the its responsibilities, goals, policies, and expertise. The EPA provided a rating of 3 (Inadequate) on the Draft RMP and EIS. EPA expressed concerns with (1) water resources monitoring, (2) disclosure of surface water and groundwater impacts and associated mitigation, (3) disclosure of riparian/wetland area impacts and associated mitigation, and (4) future air emissions. Following public release of the Proposed RMP and Final EIS, the EPA sent a letter to the BLM on June 29, 2015, acknowledging

the changes the BLM made to the RMP and EIS in augmenting information on the “status of air and water resources, monitoring procedures, gaps in impact analysis and lack of presentation of viable alternatives.” The EPA indicated that this additional information successfully resolved the Inadequate rating on the Draft RMP and EIS. The letter also identified comments on the Proposed RMP and Final EIS and requests for specific points to be included in the Approved RMP.

Governor’s Consistency Review

The BLM initiated the Wyoming Governor’s Consistency Review required by 43 CFR 1610.3-2(e) by letter from the BLM State Director dated May 29, 2015. The BLM received a letter from the Wyoming Governor dated July 29, 2015. The Governor’s Office advised the BLM the Proposed RMP had a number of inconsistencies and provided recommendations. The recommendations had been raised during public participation and included questions regarding air and water quality and conformance with the Wyoming Governor’s Core Area Strategy for Greater Sage-Grouse conservation. The BLM State Director accepted some of the recommendations, did not accept others, and advised the Governor of his decision in writing.

4.2. Public Involvement

Public involvement occurred throughout the RMP revision process beginning with the publication of the Notice of Intent to prepare an EIS on November 14, 2008. The Notice of Intent formally announced the BLM’s intent to revise the Buffalo RMP and prepare an EIS, and initiated the scoping process. The BLM hosted five scoping meetings throughout the planning area in December 2008 and gained input from interested agencies, organizations, and members of the public on issues that should be addressed in the EIS. The publication of the Notice of Availability of the Draft RMP and EIS on June 28, 2013, initiated a 90-day public comment period during which members of the public could comment on any aspect of the Draft RMP and EIS. The BLM hosted four public meetings during the comment period to inform members of the public about the plan, answer questions, and solicit comments. The comments received on the Draft RMP and EIS and BLM’s responses are summarized in Appendix Y of the Proposed RMP and Final EIS (available on the Buffalo RMP website), including copies of the comments themselves. In addition to the formal public involvement opportunities, the BLM held open houses, issued periodic planning bulletins, and updated the project website in an effort to keep the public informed about the planning process.

The BLM published the Proposed RMP and Final EIS on May 29, 2015, initiating a 30-day protest period in accordance with 43 Code of Federal Regulations (CFR) Part 1610.5-2. The protest period provided members of the public with standing the opportunity to protest the content of the Proposed RMP and Final EIS. The BLM received 18 protest letters consisting of nine industry protests from companies or organizations representing fluid minerals (4), electric utilities (2), uranium (2), and coal (1), six conservation organizations, one sporting organization, one land owner, and the State of Wyoming. The protest letters are available on the Buffalo RMP website, along with the BLM Director’s protest resolution report.

Protest issues were diverse. A common protest issue was that proposed management actions were insufficient; the conservation organizations protested that the proposed management actions would not adequately conserve sensitive resources, while industry protested that many management actions were too restrictive, not the minimum actions necessary to conserve sensitive resources, and violated valid existing rights. Several protesters charged that some proposed management actions were not consistent with the State’s management (particularly for Greater

Sage-Grouse) or did not properly recognize the State's management authority (air resources). Protesters asserted that the BLM presented significant new information in the Proposed RMP and Final EIS that required a Supplemental EIS be prepared and circulated for public review. The protests declared other NEPA failures such as an inadequate range of alternatives, inadequate analysis of alternatives, alternatives analyzed not meeting the BLM's purpose and need, insufficient analysis and response to the public comments on the Draft RMP/EIS, and that the BLM did not use the best available science. The protests included requests for greater protection for split estate landowners including increased bond amounts.

In accordance with 43 CFR 1610.5-2(b), the decision of the BLM Director is the final decision of the Department of the Interior and there are no further administrative remedies available.

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Chapter 5. Plan Implementation

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5.1. Implementing the Plan

Implementation, after a Bureau of Land Management (BLM) Resource Management Plan (RMP) or RMP amendment is approved, is a continuous and active process. Most of the land use plan decisions are effective upon approval of this document; however, some decisions will take a number of years to implement. Implementation monitoring will track which decisions have been implemented and when. Decisions presented as Management Decisions can be characterized as *immediate* or *one-time future* decisions.

Immediate Decisions: These decisions are the land use planning decisions that go into effect upon signature of the Record of Decision (ROD). These include goals, objectives, allowable uses and management direction, such as the allocation of lands as open or closed for salable mineral sales, lands open with stipulations for oil and gas leasing, and off-highway vehicle (OHV) area designations. These decisions require no additional analysis and guide future land management actions and subsequent site-specific implementation decisions in the planning area. Proposals for future actions such as oil and gas leasing, land adjustments, and other allocation-based actions will be reviewed against these land use plan decisions to determine if the proposal is in conformance with the plan.

One-Time Future Decisions: These types of decisions include those that are not implemented until additional decision-making and site-specific analysis is completed. Examples are implementation of the recommendations to withdraw lands from locatable mineral entry or development of travel management plans. Future one-time decisions require additional analysis and decision-making and are prioritized as part of the BLM budget process. Priorities for implementation of "one-time" RMP decisions will be based on several criteria, including:

- Current and projected resource needs and demands,
- National BLM management direction, and
- Available resources.

General Implementation Schedule of "One-Time" Decisions: Future Decisions discussed in this Approved RMP will be implemented over a period of years depending on budget and staff availability. After issuing the ROD, the BLM will prepare implementation plans that establish tentative timeframes for completion of "one-time" decisions identified in the Approved RMP. These actions require additional site-specific decision-making and analysis.

This schedule will assist BLM managers and staff in preparing budget requests and in scheduling work. However, the proposed schedule must be considered tentative and will be affected by future funding, changing program priorities, non-discretionary workloads, and cooperation by partners and external publics. Yearly review of the plan will provide consistent tracking of accomplishments and provide information that can be used to develop annual budget requests to continue implementation.

The implementation strategy will include coordination meetings between the BLM and cooperating agencies involved in revising the RMP. The coordination meetings will include updates on implementation of the plan, foreseeable activities for the upcoming year, and opportunities for continued collaboration with the cooperating agencies. Additional coordination meetings could be held as needed. Appendix X (p. 781) further describes the implementation process for the Approved RMP.

Appendix D (p. 325) includes a framework for implementation of Greater Sage-Grouse conservation measures within the Buffalo planning area. This framework is focused specifically on Greater Sage-Grouse and does not address implementation of other resource programs. Implementation for Greater Sage-Grouse includes a combination of permitting activities under the auspices of management direction provided in the Approved RMP, undertaking specific activities in pursuit of the goals and objectives identified in the plan, and monitoring of sage brush habitat and populations.

5.2. Maintaining the Plan

The Approved RMP can be maintained as necessary to reflect minor changes in data. Plan maintenance is limited to further refining or documenting a previously approved decision incorporated in the plan and/or clarifying previously approved decisions.

The BLM expects that new information gathered from field inventories and assessments, research, other agency studies, and other sources will update baseline data and/or support new management techniques, best management practices, and scientific principles. Where monitoring shows land use plan actions or best management practices are not effective, plan maintenance or plan amendment may be initiated, as appropriate.

Plan maintenance will be documented in supporting records. Plan maintenance does not require formal public involvement, interagency coordination, or the National Environmental Policy Act (NEPA) analysis required for making new land use plan decisions.

5.3. Changing the Plan

The Approved RMP may be changed, should conditions warrant, through a plan amendment or plan revision process. A plan amendment may become necessary if major changes are needed or to consider a proposal or action that is not in conformance with the plan. The results of monitoring, evaluation of new data, or policy changes and changing public needs might also provide a need for a plan amendment. If several areas of the plan become outdated or otherwise obsolete, a plan revision may become necessary. Plan amendments and revisions are accomplished with public input and the appropriate level of environmental analysis conducted according to the Council on Environmental Quality procedures for implementation of the NEPA.

As new information becomes available about Greater Sage-Grouse habitat, including seasonal habitats, in coordination with the Wyoming Game and Fish Department, Sage Grouse Implementation Team, and U.S. Fish and Wildlife Service, and based on best available scientific information, the BLM may revise the Greater Sage-Grouse habitat management area maps and associated management decisions through plan maintenance or plan amendment/revision, as appropriate.

5.4. Plan Evaluation, Monitoring, and Adaptive Management

Plan evaluation is the process by which the plan and monitoring data are reviewed to determine if management goals and objectives are being met and if management direction is sound. Land use plan evaluations determine if decisions are being implemented, whether mitigation measures are satisfactory, whether there are significant changes in the related plans of other entities, whether there is new data of significance to the plan, and if decisions should be modified via amendment

or revision. Monitoring data gathered over time are examined and used to draw conclusions on whether management actions are meeting stated objectives, and if not, why. Conclusions are then used to make recommendations on whether to continue current management or to identify which changes need to be made in management practices to meet objectives.

The BLM will use land use plan evaluations to determine if the decisions in the Approved RMP, supported by the accompanying NEPA analysis, are still valid in light of new information and monitoring data. Evaluations will follow the protocols established by the BLM Land Use Planning Handbook (H-1601-1) or other appropriate guidance in effect at the time the evaluation is initiated. The Monitoring Framework for this Approved RMP can be found in Appendix D (p. 325).

The Approved RMP also includes an adaptive management strategy that includes soft and hard triggers and responses. These triggers are not specific to any particular project, but identify habitat and population thresholds. Triggers are based on the two key metrics that are being monitored during the life of the Approved RMP — habitat loss and/or population declines. Soft triggers represent an intermediate threshold indicating that management changes are needed at the implementation level to address habitat or population losses. If a soft trigger is tripped during the life of the plan, the BLM's response is to apply more conservative or restrictive conservation measures to mitigate for the specific causal factor in the decline of populations and/or habitats, with consideration of local knowledge and conditions. These adjustments will be made to preclude tripping a "hard" trigger (which signals more severe habitat loss or populations declines). Hard triggers represent a threshold indicating that immediate action is necessary to stop a severe deviation from Greater Sage-Grouse conservation objectives set forth in the Approved RMP.

In the event that new scientific information becomes available demonstrating that the hard wired response would be insufficient to stop a severe deviation from Greater Sage-Grouse conservation objectives set forth in the Approved RMP, the BLM will implement interim management direction to ensure that conservation options are not foreclosed. The BLM will also undertake any appropriate plan amendments or revision if necessary. More information regarding the Approved RMP's adaptive management strategy can be found in Appendix D (p. 325).

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Chapter 6. Glossary

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Glossary

Access:

The opportunity to approach, enter, or cross public lands.

Accessible:

A term used to describe a site, building, facility, or trail that complies with the Architectural Barriers Act Accessibility Standards and can be approached, entered, and used by people with disabilities.

Active Mining Claim:

See Mining Claim.

Active Nest:

A nest that could reasonably be expected to be occupied in the future; the period of time that a nest can be unoccupied but still classified as active varies and is dependent on the characteristics of the species most likely to use the nest in the future.

ADA Compliant:

The subject (e.g., facility, website, trail) meets the standards of the Americans with Disabilities Act of 1990 (ADA). For example; new facility construction or alterations that meet the ADA standards published in the Title II (28 Code of Federal Regulations [CFR] part 35) and Title III regulations (28 CFR Part 36) issued by the Department of Justice (Revised September 15, 2010).

Administrative Access:

A term used to describe access for resource management and administrative purposes such as fire suppression, law enforcement and military in the performance of their official duties, or other access needed to manage Bureau of Land Management (BLM)-administered lands.

Allotment:

An area of land where one or more livestock operators graze their livestock. Allotments are BLM-administered lands, but may also include other federally managed, state-owned, and private lands. An allotment may include one or more separate pastures. Livestock numbers and periods of use are specified for each allotment.

Allotment Categorization:

All allotments in the Buffalo planning area have been categorized as Improve (I), Maintain (M), or Custodial (C), based on resource values and opportunities for improvement. Allotment category refers to the BLM's level of management for a given grazing allotment and is used to establish priorities for distributing available funds and personnel during plan implementation to achieve cost-effective improvement of rangeland resources. Categorization is also used to organize allotments into similar groups for purposes of developing multiple use prescriptions, analyzing site-specific and cumulative impacts, and determining trade-offs. Allotments in Category I are managed more intensively and are monitored more frequently. Allotments in Category M are usually at a desired condition and are managed to maintain or improve that condition. Allotments in Category C are usually isolated parcels with few resource concerns that are fenced in with larger parcels of deeded land, are managed in conjunction with the permittee/lessee's normal livestock operation, and are monitored less frequently. Additional information on the categories follows:

- **I (Improve):** The category for allotments where (1) present range condition is unsatisfactory and where range condition is expected to decline further; (2) present grazing management is not adequate; (3) the allotment has potential for medium to high vegetative production but production is low to moderate; (4) resource conflicts/controversy with livestock grazing are evident; or (5) there is potential for positive economic return on public investment.
- **M (Maintain):** The category for allotments where (1) the present range condition and management are satisfactory with good to excellent condition and will be maintained under present management; or fair condition and improving with improvement expected to continue under present management, or opportunities for BLM management are limited because percentage of public land is low or acreage of public lands is small; (2) the allotment has a potential for moderate or high vegetative production and is producing at or near this potential; (3) there are no significant land-use resource conflicts with livestock grazing; (4) land ownership status may or may not limit management opportunities; or (5) opportunities for positive economic return from public investment may exist.
- **C (Custodial):** The category for allotments where (1) present range condition is not in a downward trend; (2) the allotment has a low vegetative production potential and is producing near this level; (3) there may or may not be limited conflicts between livestock grazing and other resources; (4) present management is satisfactory or is the only logical management under existing conditions; and (5) opportunities for a positive economic return on public investments do not exist.

Allotment Management Plan:

A written program of livestock grazing management, including supportive measures if required, designed to attain specific management goals in a grazing allotment.

Ambient (noise level):

Sometimes called background noise level, reference sound level, or room noise level is the background sound pressure level at a given location, normally specified as a reference level to study a new intrusive sound source.

Analysis Area:

Any lands, regardless of jurisdiction, for which the BLM synthesizes, analyzes, and interprets data for information that relates to planning for BLM-administered lands.

Animal Unit Month (AUM):

A standardized measurement of the amount of forage necessary for the sustenance of one cow unit or its equivalent for one month (approximately 800 pounds of forage).

Annual Brome:

A term that commonly refers to non-native annual brome grasses invading western rangelands. Annual brome species include, among others, cheatgrass (*Bromus tectorum*) and Japanese brome (*B. japonicas*).

Archeological Monitor:

A professional archeologist contracted to observe firsthand surface-disturbing activity occurring in areas of known or predicted cultural sensitivity and to make recommendations to protect cultural resources that may be affected. An Archeological Monitor must meet the Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61) for an archeologist.

Archeological site:

A place that holds evidence of past human activity.

Area of Critical Environmental Concern (ACEC):

An area within the public lands designated for special management attention to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards. According to 43 CFR 1601.0-5a, “The identification of...[an] ACEC shall not, of itself, change or prevent change of the management or use of public lands.”

Artifact:

Any object made, modified or used by humans, usually but not necessarily portable.

Avoid:

A term used to address mitigation of some activity (i.e., resource use). Paraphrasing the Council on Environmental Quality (CEQ) Regulations (40 CFR 1508.20), avoidance means to circumvent or bypass an impact altogether by not taking a certain action, or parts of an action. Therefore, the term “avoid” does not necessarily prohibit a proposed activity, but it may require the relocation, or the total redesign of an action to eliminate any potential impacts resulting from it.

Avoidance Areas:

Areas with sensitive resource values where rights-of-way (ROWs) and Section 302 permits, leases, and easements would be strongly discouraged. Authorizations made in avoidance areas would have to be compatible with the purpose for which the area was designated and not be otherwise feasible on lands outside the avoidance area.

Back Country Byway:

- **Back Country Byway Type I:** Byways that are either paved or have an all-weather surface. Normal passenger cars can easily negotiate the roads. They are usually narrow, slow-speed, secondary roads. None of the byways follow the main highways.
- **Back Country Byway Type II:** Roads that require high-clearance trucks or four-wheel-drive vehicles, although passenger cars may be able to negotiate them under good conditions. These roads are not paved but often have an improved gravel surface. They often cross dry, rocky arroyos, have rough, rutted sections, and have occasional steep grades and sharp curves.
- **Back Country Byway Type III:** Byways requiring four-wheel-drive vehicles and others such as dirt bikes and all-terrain vehicles. These roads are often unimproved dirt tracks. Expect steep grades, rocky and muddy sections, and possible route-finding. Do not attempt these byways in a two-wheel-drive vehicle; the consequences could be serious for operator/passenger and car.
- **Back Country Byway Type IV:** Trails that are managed for snowmobile, dirt bike, mountain bike, or all-terrain vehicle use.

Badland:

Moderately steep to very steep barren land dissected by many intermittent drainage channels. Ordinarily, the areas are not stony. Badland is most common in semiarid and arid regions where streams cut into soft geologic material. Local relief generally ranges between 10 and 200 meters. Potential runoff is very high, and erosion is active. *Soil Survey Division*

Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Baseline:

The pre-existing condition of a defined area and/or resource that can be quantified by an appropriate metric(s). During environmental reviews, the baseline is considered the affected environment that exists at the time of the review's initiation, and is used to compare predictions of the effects of the proposed action or a reasonable range of alternatives.

Basin:

hydrologic basin: An extent of land where water from rain or snow melt drains downhill into a body of water, such as a river, lake, reservoir, estuary, wetland, sea or ocean. The basin includes the streams and rivers that convey the water as well as the land surfaces from which water drains into those channels, and is separated from adjacent basins by a drainage divide.

geologic basin: A geographic depression in the earth's surface in which sediments accumulate over time.

Big Game Crucial Winter Range:

Winter habitat on which a wildlife species depends for survival. Because of severe weather conditions or other limiting factors, no alternative habitat would be available.

BLM-administered Land:

Land or interest in land owned by the United States and administered by the Secretary of the Interior through the BLM, except lands located on the Outer Continental Shelf and land held for the benefit of Indians, Aleuts, and Eskimos. Synonym for public lands administered by BLM; includes surface and/or mineral estate.

BLM Jurisdiction:

Synonym for public lands; includes surface and/or mineral estate.

BLM-managed Land:

Synonym for public lands; includes surface and/or mineral estate.

BLM Surface Land:

Those public lands where the surface estate is owned by the United States and administered by the Secretary of the Interior through the BLM.

Camping:

Erecting a tent or shelter or arranging bedding, or both, or parking a vehicle for the purpose of remaining overnight on land.

Carbon Dioxide (CO₂):

A colorless, odorless, nontoxic gas that is a normal component of Earth's atmosphere. One of a number of "greenhouse gases."

Carbon Dioxide (CO₂) Flood:

An enhanced oil recovery technique that injects fluid into the reservoir. When CO₂ is injected, it mixes with the oil and the two compounds dissolve into one another. The injected CO₂ acts as a solvent to overcome forces that trap oil in tiny rock pores and helps sweep the immobile oil left behind after the effectiveness of water injection decreases, resulting in increased oil production.

Casual Use:

Activities ordinarily resulting in no or negligible disturbance of public lands, resources, or improvements (43 CFR 2801.5, 2881.5, 3150.0-5, 3200.1, 3400.0-5, 3482.1, and 3809.5).

Cave:

Any naturally occurring void, cavity, recess, or system of interconnected passages beneath the surface of the earth or within a cliff or ledge, including any cave resource therein, and that is large enough to permit a person to enter, whether the entrance is excavated or naturally formed. The term includes any natural pit, sinkhole, or other feature that is an extension of a cave entrance or that is an integral part of the cave.

Cave Significance Criteria:

Under the Federal Cave Resources Protection Act, a cave is considered significant if it meets one or more of the following criteria (per 43 CFR 37.11(c)).

- **Biota:** The cave provides seasonal or yearlong habitat for organisms or animals, or contains species or subspecies of flora or fauna that are native to caves, are sensitive to disturbance, or are found on state or federal sensitive, Threatened, or Endangered species lists.
- **Cultural:** The cave contains historic properties or archeological resources or other features that are included in or eligible for inclusion in the National Register of Historic Places because of their research importance for history or prehistory, historical associations, or other historical or traditional significance.
- **Geologic/Mineralogic/Paleontologic:** The cave possesses one or more of the following features: (1) geologic or mineralogic features that are fragile, that exhibit interesting formation processes, or that are otherwise useful for study; (2) deposits of sediments or features useful for evaluating past events; or (3) paleontologic resources with potential to contribute useful educational and scientific information.
- **Hydrologic:** The cave is a part of a hydrologic system or contains water that is important to humans, biota, or development of cave resources.
- **Recreational:** The cave provides or could provide recreational opportunities or scenic values.
- **Educational or Scientific:** The cave offers opportunities for educational or scientific use; the cave is virtually in a pristine state, lacking evidence of contemporary human disturbance or impact; or, the length, volume, total depth, pit depth, height, or similar measurements are notable.

Cheatgrass:

An annual grass that forms tufts up to 2 feet tall. The leaves and sheaths are covered in short, soft hairs. The flowers occur as drooping, open, terminal clusters that can have a greenish, red, or purple hue. Flowering occurs in the early summer. These annual plants will germinate in fall or spring (fall is more common), and senescence usually occurs in summer. Cheatgrass invades rangelands, pastures, prairies, and other open areas. Cheatgrass has the potential to completely alter the ecosystems it invades. It can completely replace native vegetation and change fire regimes and is most problematic in areas of the western United States with lower precipitation levels.

Clinker:

A reddish or brownish to black rock common in certain areas of the Powder River Basin, often near or above coal outcrops. Formed when the heat produced from a coal seam fire baked and/or melted the rocks, sediments, and/or soils on top of the coal seam. Ranges from friable

(easily broken) to very durable and hard to break. Can have a bubbly-looking appearance, which gave rise to its local name of “scoria” (a bubbly-looking volcanic rock).

Closed:

Generally denotes that an area is not available for a particular use or uses; refers to specific definitions found in law, regulations, or policy guidance for application to individual programs.

Commercial Use:

Recreational use of public lands and related waters for business or financial gain. Financial gain includes gratuities, donations, gifts, bartering, etc.

Commodity:

An economic good, such as a product of agriculture or mining.

Communication Site Management Plan:

A plan that provides for effective administration of a communications site. The site plan defines the principles and technical standards adopted in the site designation. The site plan provides direction for the day-to-day operations of the site in connection with the lease. The site plan delineates the types of uses that are appropriate at the site and the technical and administrative requirements for management of the site. The site plan should reflect the complexity of the current situation and the anticipated demand for the site.

Community Wildfire Protection Plan (CWPP):

A plan for at risk communities that identifies and prioritizes areas for hazardous fuel reduction treatments, recommends the types and methods of treatment on federal and non-federal land that will protect one or more at-risk communities and essential infrastructure, and recommends measures to reduce structural ignitability throughout the at-risk community. A CWPP is a collaborative product involving interested parties, local government, local firefighting agencies, the state agency that oversees forest management, and federal land management agencies.

Consumptive Use:

The use of a resource that reduces the supply. For example, removing water from a source like a river, lake, or aquifer without returning an equal amount of water, reduces the supply.

Contrast:

Opposition or unlikeness of different forms, lines, colors, or texture in a landscape.

Controlled Surface Use (CSU):

Surface occupancy or use will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts. Identified resource values require special operational constraints that may modify the lease rights. CSU is used for operating guidance, not as a substitute for the no surface occupancy or timing limitation stipulations.

Core Population Area:

Defined in WY EO 2015-4 as one of two components of Sage-Grouse Priority Habitat Management Areas, they are state-designated areas identified as the most important for Greater Sage-Grouse and include breeding, late brood-rearing, and wintering seasonal habitat. It does not include known migration or connectivity corridors.

Cultural Resource Inventory Levels:

A three-tiered process for discovering, recording, and evaluating cultural resources.

- **Class I** – A review of existing literature and oral informant data combined with an analysis of a specific geographic region (e.g., an area of potential effect, drainage basin, resource area).
- **Class II** – A sampling survey usually aimed at developing and testing a predictive model of cultural resource distribution.
- **Class III** – An on-the-ground survey to discover, record, and evaluate cultural resources within a specific geographic area (usually an area of potential effect for a proposed undertaking).

Culture:

The customs, beliefs, and ways of life of a group of people.

Day-use:

Visitor use during the period of one-half hour before sunrise until one-half hour after sunset. Alternatively, a day use site may post hours for a defined time (e.g., 6 a.m. until 10 p.m.).

dB (decibel):

A unit of measurement of the loudness or strength of a signal. One decibel is considered the smallest difference in sound level that the human ear can discern. Decibels are a relative measurement derived from two signal levels: a reference input level and an observed output level. A decibel is the logarithm of the ratio of the two levels. One Bel is when the output signal is 10 times that of the input and one decibel is 1/10th of a Bel.

Defer:

Postpone for the life of the plan.

Defer (Minerals):

To set-aside, or postpone to a later time a particular resource use(s) or activity(ies) on public lands. Generally when this term is used the period of the deferral is specified. Deferments sometimes follow the sequence timeframe of associated serial actions (e.g., action B will be deferred until action A is completed).

Deferment (Livestock Grazing):

Delay of livestock grazing on an area for an adequate period of time to provide for plant reproduction, establishment of new plants, or restoration of vigor of existing plants.

Designated Roads and Trails:

Specific roads and trails on which some type of motorized vehicle use is allowed either seasonally or year-long. Use can be defined as open to the general public or for administrative use only.

Desired Future Condition (DFC):

Landscape conditions and management scenarios that should exist for a specific land area and for a specific resource (e.g., livestock grazing or wildlife) that meet the managing agency's vision statement and objectives for ecological, economic and social considerations.

Desired Future Condition (DFC) for Riparian and Wetlands (after 20–40 years of management):

- Manage for proper functioning conditions (PFCs) on all riparian and wetland habitats.

- Riparian and wetland vegetation supports PFC of biologic, hydrologic, and physical components of streams and wetlands.
- Systems are vertically stable (no downcutting).
- Floodplain connectivity.
- Herbaceous plant communities are composed of functional and structural plant groups that are dominated by deep-rooted native species that support stream bank and shoreline stability, floodplain development, water quality, and nutrient cycling. Also includes woody species and cottonwoods within the site's potential.
- Management of invasive, noxious, and undesirable species.
- Provide "Yellow, Red, and Blue Ribbon" streams on those systems with fish habitat potential.

Desired Plant Community (DPC):

Of the several plant communities that may occupy a site, the DPC is the community that has been identified through a management plan to best meet the plan's objectives for the site. At a minimum, it must protect the site.

Destroyed Lek:

Destroyed lek – A formerly active lek site and surrounding sagebrush habitat that has been destroyed and is no longer suitable for Greater Sage-Grouse breeding. A lek site that has been strip-mined, paved, converted to cropland, or undergone other long-term habitat type conversion is considered destroyed. Destroyed leks are not monitored unless the site has been reclaimed to suitable Greater Sage-Grouse habitat.

Developed Recreation Site:

Any designated site or location built or improved for recreation and visitor services on BLM-administered land, such as a trailhead, scenic vista, interpretive site, parking area, boat launch, picnic area, potable water source, restroom or campground.

Dispersed Recreation:

Recreation that occurs on BLM-administered lands outside of a developed recreation site or designated trail.

Disposal:

Federally owned Salable Minerals (mineral materials) are disposed of through federally-approved actions, including sales and free use. Sales generate a set royalty to the federal government, by the ton or cubic yard, while royalty-free use is granted to municipal governments for uses in public works projects and to qualified non-profit organizations.

Disruptive Activity:

Those public land resource uses/activities that are likely to alter the behavior, displace, or cause excessive stress to existing animal or human populations occurring at a specific location and/or time. In this context, disruptive activity(ies) refers to those actions that alter behavior or cause the displacement of individuals such that reproductive success is adversely affected, or an individual's physiological ability to cope with environmental stress is compromised. This term does not apply to the physical disturbance of the land surface, vegetation, or features. Examples of disruptive activities include noise, human foot or vehicle traffic, domestic livestock roundups, or other human presence regardless of the activity. When administered as a land use restriction (e.g., No Disruptive Activities), this term may prohibit or limit the physical presence of sound above ambient levels, light beyond background levels, and/or the nearness of people and their activities. The term is commonly used in conjunction

with protecting wildlife during crucial life stages (e.g., breeding, nesting, birthing), although it could apply to any resource value on the public lands. This land use restriction is not intended to prohibit all activity or authorized uses (IB WY-2007-029).

Disturbance Free Buffer Zone:

An area from which surface-disturbing and disruptive activities are prohibited for the protection of a resource. This is synonymous with “minimal human activity levels” as described in the Greater Yellowstone Bald Eagle Management Plan (Greater Yellowstone Bald Eagle Working Group 1996). Essentially no disruptive activity with the following exceptions: (1) existing patterns of land use activities, (2) monitoring or research activities by experienced personnel, and (3) traffic that maintains a constant velocity (no stopping) and at an acceptable frequency.

Ecological Site:

A kind of land with a specific potential natural community and specific physical site characteristics, differing from other kinds of land in that the site has the ability to produce distinctive kinds and amounts of vegetation and to respond to management. Ecological sites are defined and described with information about soil, species composition, and annual production.

Endangered Species:

Any species that is in danger of extinction throughout all or a significant portion of its range.

Enhancement:

A management action designed to improve visual quality.

Environment:

The conditions around an area that affect it. These include geography, soil, climate, plants, and animals.

Ephemeral Stream:

A stream that flows only in direct response to precipitation, and whose channel is at all times above the water table. Confusion over the distinction between intermittent and ephemeral streams may be minimized by applying Meinzer’s suggestion that the term “ephemeral” be arbitrarily restricted to streams that do not flow continuously for at least 30 days (Prichard et al. 1998). Ephemeral streams support riparian areas when streamside vegetation reflects the presence of permanent subsurface water.

Erosion:

The general term used for any of a group of processes whereby earth materials (rocks, soil, and sediments) are worn away, removed, and/or moved to another site. Erosion includes mechanical processes (such as physical wearing away by water and wind, and movement due to gravity), chemical processes (such as dissolution by water and the constituents in water), and biological processes (such as breaking down by plants into soil, and consumption of rocks by lichen).

Evidence:

Data that are used to prove a point, or that clearly indicate a situation.

Excavation (cultural resources):

Carefully removing layers of dirt or sediment to find objects or features made by people from long ago.

Exceedance:

An event in which measurements of ambient air quality are above the National Ambient Air Quality Standard (NAAQS) or the Wyoming Department of Environmental Quality (DEQ) standard set for a particular pollutant. For example, an annual average nitrogen dioxide value of 110 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) is an exceedance of both the NAAQS and Wyoming DEQ annual average standard for nitrogen dioxide of 100 $\mu\text{g}/\text{m}^3$.

Exclusion Areas:

Areas with sensitive resource values where ROWs and 302 permits, leases, and easements would not be authorized.

Extensive Recreation Management Areas (ERMA):

See *Recreation Management Areas*.

Extinct:

No longer existing or active; died out.

Extinction:

Bring to an end, wiping out, or destruction.

Facility, Energy and Mining:

Human constructed assets designed and created to serve a particular function and to afford a particular convenience or service that is affixed to a specific locations, such as oil and gas well pads and associated infrastructure.

Federal Mineral Estate:

Lands where all or some minerals (such as coal or oil and gas) underlying the surface are owned by the federal government.

Federal Undertaking:

A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including:

- a. those carried out by or on behalf of the agency;
- b. those carried out with federal financial assistance;
- c. those requiring a federal permit license, or approval; and
- d. those subject to State or local regulation administered pursuant to a delegation or approval by a federal agency (16 United States Code [U.S.C.] 470w).

Fire-adapted:

Those organisms or plant communities where fire is essential and the species have evolved adaptations to respond positively to fire and to facilitate fire's spread, i.e., the vegetation is fire-prone and flammable.

Firearm:

A loaded or unloaded pistol, rifle, shotgun, or other barreled weapon that is designed to, or may be readily converted to, expel a projectile by the action of an explosive.

Fire Management Plan:

A strategic plan that identifies appropriate strategies to achieve resource objectives based on an approved Resource Management Plan. Identifies fire policy, objectives, and prescribed actions; may include maps, charts, tables, and statistical data.

Fire Regime Condition Class:

A classification of the amount of departure from the natural fire regime. The departure results in changes to one or more of the following ecological components: vegetation characteristics (e.g., species composition, structural stages, stand age, canopy closure, mosaic pattern); fuel composition; fire frequency, severity, and pattern; and other associated disturbance (e.g., insect and disease mortality, grazing, drought). The three condition classes are listed below:

Condition Class 1

- The historic disturbance regime is largely intact and functioning (e.g., has not missed a fire return interval)
- Potential intensity and severity of fire within historic range
- Effects of disease and insects within historic range
- Hydrologic functions within normal historic range
- Vegetation composition and structure resilient to disturbances
- Non-native species currently not present or to a limited extent
- Low risk of loss for key ecosystem components

Condition Class 2

- Moderate alterations to historic disturbance regime evident (e.g., missed one or more fire return intervals)
- Effects of disease and insects pose an increased risk of loss of key community components
- Riparian areas and associated hydrologic function show measurable signs of adverse departure from historic conditions
- Vegetation composition and structure shifted toward conditions less resilient to disturbances
- Populations of non-native species may have increased, increasing the risk of further increases following disturbance

Condition Class 3

- Historic disturbance regime significantly altered; historic disturbance processes and impacts may be precluded (e.g., missed several fire return intervals)
- Effects of disturbance (fire, insects, and disease) may cause significant or complete loss of key community components
- Hydrologic functions may be adversely altered; high potential for increased sedimentation and reduced streamflows
- Invasive species may be common and in some cases the dominant species on the landscape; disturbance will likely increase both the dominance and geographic extent of these invasive species
- Highly altered vegetation composition and structure predisposes community to disturbance events outside the range of historic availability; disturbance may have effects not observed or measured before

Fire Return Interval:

The number of years between two successive fire events at a specific site or area.

Flaring/Venting:

The controlled burning (flare) or release (vent) of natural gas that cannot be processed for sale or use because of technical or economic reasons.

Floodplain Connectivity:

Maintenance of lateral, longitudinal, and vertical pathways for biological and hydrological processes in the floodplain. Examples of failures to maintain connectivity could include culverts or levees that restrict flow in the floodplain and that focus overbank flow into the channel.

Foothill:

A low hill near the base of a mountain or range of mountains.

Fossil:

The remains or traces of an organism preserved by natural processes in the earth's crust. This includes plants and animals and their tracks, burrows, and other imprints. Fossils are considered a nonrenewable resource. The definition does not include minerals derived from fossils, such as coal or oil and gas.

Fresh Water:

Water containing total dissolved solids concentrations of less than 10,000 milligrams per liter.

Geologic Resources:

Resources associated with the earth, including its composition, structure, and physical properties. Geologic resources commonly include the structure of the earth, rocks, and minerals; landforms; and the processes that produce them.

Geothermal Energy:

Heat energy that occurs naturally in the earth and that can be extracted and used. Can be either moist (containing water as steam) or dry.

Goal:

A broad statement of a desired outcome. Goals are usually not quantifiable and may not have established timeframes for achievement.

Grazing Relinquishment:

The voluntary and permanent surrender by an existing permittee or lessee, (with concurrence of any base property lienholder[s]) of their priority (preference) to use a livestock forage allocation on public land as well as their permission to use this forage. Relinquishments do not require the consent of or approval by the BLM. The BLM's receipt of a relinquishment is not a decision to close areas to livestock grazing.

Greenhouse Gas:

A gas that absorbs and retains heat radiation. These gases include CO₂, water vapor, and methane (CH₄).

Guzzler:

A water development for wildlife.

Habitat Destruction (Loss/Conversion):

The ultimate form of a habitat impact. The destruction of a natural ecosystem through its conversion to another land use. In each conversion, the original natural characteristics of the land are eliminated, while the associated habitat values are modified to varying degrees.

Habitat Fragmentation:

A form of habitat impact that often only destroys part of a habitat, leaving other portions of the habitat intact. Depending on the scale of concern, many instances of local habitat destruction are better thought of as habitat fragmentation, or partitioning. Such fragmentation can be the principal cause of loss of “area-sensitive” species (e.g., grizzly bears, Greater Sage-Grouse), and is the most serious threat to biological diversity.

Hazardous Fuel:

Excessive live or dead wildland fuel accumulations that increase the potential for uncharacteristically intense wildland fire and decrease the capability to protect life, property, and natural resources.

Hazardous Substance:

As defined by the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601(14)), means (A) any substance designated pursuant to section 311(b)(2)(A) of the Federal Water Pollution Control Act (33 U.S.C. 1321(b)(2)(A)), (B) any element, compound, mixture, solution, or substance designated pursuant to 42 U.S.C. 9602, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 U.S.C. 6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 307(a) of the Federal Water Pollution Control Act (33 U.S.C. 1317(a)), (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 U.S.C. 7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act (15 U.S.C. 2606). The term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under subparagraphs of the regulations above, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

Heavy Equipment:

As applicable for wildfire management actions that restrict “Heavy Equipment,” this would include: dozers, skidders, and graders. It would not include fire engines or water tenders.

Highly Erosive Soil:

There are two primary erosion mechanisms, water and wind. Highly erosive soils have severe potential for erosion from one or both of these mechanisms.

Water Erosion – Water erosion is a function of soil erodibility and percent slope. Soil erodibility factor (Kw) quantifies soil detachment by runoff and raindrop impact. Factor Kw applies to the whole soil, which includes rock fragments. Kw is based primarily on percentage of silt, sand, and organic matter, soil structure, saturated hydraulic conductivity, and rock fragments. Values of Kw range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water (NRCS 2010).

Slope gradient is the difference in elevation between two points, expressed as a percentage of the difference between those points. Representative Value Slope indicates the expected slope value for a given sediment management unit (NRCS 2010).

Water Erosion Hazard = Kw factor x Representative Value Slope. A water erosion hazard greater than 7 is rated severe.

Wind Erosion – There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture, frozen soil layers, slope and other factors may also influence erosion. There are nine wind erosion groupings (WEG): 1, 2, 3, 4, 4L, 5, 6, 7, and 8. The lower the number, the greater the risk of wind erosion. WEG 1 and 2 are considered susceptible to wind erosion.

Historic:

Referring to the time after written records or after the Europeans first came to and wrote about the people and events in America.

Historic Property:

Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on, the National Register of Historic Places maintained by the Secretary of the Interior. They include artifacts, records, and material remains related to such a property or resource (16 U.S.C. 470w).

History:

The study of past events and times through use of written and recorded sources. In some cases, oral sources may also be available.

Hydrogen Sulfide (H₂S):

The chemical formula for H₂S. This colorless, toxic, and flammable gas often results from the break down of sulfites within nonorganic matter in the absence of oxygen. H₂S can occur in natural gas, swamps, volcanic gases, and well water.

Indicator:

A component of a system whose characteristics (for example, presence, absence, quantity, and distribution) can be observed, measured, or monitored based on sound scientific principles. An indicator can be evaluated at a site- or species-specific level. Monitoring of an indicator must be able to show change within timeframes acceptable to management and be capable to show how the health of the ecosystem is changing in response to specific management actions. Selection of the appropriate indicators to be observed, measured, or monitored in a particular allotment is a critical aspect of early communication among the interests involved on-the-ground. The most useful indicators are those for which a change or trend can be easily quantified and for which agreement as to the significance of the indicator is broad based.

Infestation:

The inhabitation of a host by large numbers of pests, such as bark beetles on pine trees.

***In Situ* Leaching or *In Situ* Recovery:**

A mining method whereby the valuable mineral(s) of a mineral deposit are removed without requiring physical extraction of the rock(s) containing the mineral(s). Also called “solution mining.” Using *In Situ* Leaching or *In Situ* Recovery methods eliminates much of the tailings

and waste that would be created during traditional mining methods (underground or surface mining).

Integrated Pest Management:

A pest control strategy that uses a variety of complementary strategies including: mechanical devices; physical devices; genetic, biological, and cultural management; and chemical management. These methods are done in three stages: prevention, observation, and intervention. It is an ecological approach with a main goal of significantly reducing or eliminating the use of pesticides while at the same time managing pest populations at an acceptable level.

Intermittent Stream:

A stream that flows only at certain times of the year when it receives water from springs or from some surface source, such as melting snow in mountainous areas. Confusion over the distinction between intermittent and ephemeral streams may be minimized by applying Meinzer's suggestion that the term "intermittent" be arbitrarily restricted to streams that flow continuously for periods of at least 30 days (Prichard et al. 1998).

Invasive Species:

A non-native species whose introduction causes or is likely to cause economic or environmental harm or harm to human health (Executive Order [EO] 13112).

Landscape Character:

The arrangement of a particular landscape as formed by the variety and intensity of the landscape features and the four basic elements of form, line, color, and texture. These factors give the area a distinctive quality that distinguishes it from its immediate surroundings.

Land Tenure:

To improve the manageability of BLM-administered lands and improve their usefulness to the public, the BLM has numerous authorities for "repositioning" lands into a more consolidated pattern, disposing of lands, and entering into cooperative management agreements. These land-pattern improvements are completed primarily through the use of land exchanges, but also land sales, jurisdictional transfers to other agencies, and the use of cooperative management agreements and leases. These ownership or jurisdictional changes are referred to as "Land Tenure Adjustments."

Leasable Minerals:

Those minerals or materials subject to lease by the federal government under the Mineral Leasing Act of 1920, the Mineral Leasing Act for Acquired Lands of 1947, and their amendments. They include, but are not limited to coal, phosphate, asphalt, sulphur, potassium, and sodium minerals, oil and gas, as well as geothermal resources, and are administered pursuant to 43 CFR Parts 3100, 3200, 3400, 3500 and 3900.

Lease:

Any contract, profit-share arrangement, joint venture, or other agreement issued or approved by the United States under a mineral leasing law that authorizes exploration for, extraction of, or removal of minerals. Federally owned leasable minerals, such as coal, oil and gas, are obtained through a lease, in which the federal government receives a set royalty for each mineral being extracted.

Lease By Application (LBA):

An application for a federal coal lease under a competitive, sealed-bid process (see regulations under 43 CFR 3425). Not part of regional coal leasing (described under 43 CFR 3420), the LBA process pertains to leasing individual coal tracts which will continue or extend the life of an existing mine. If an LBA meets regulatory requirements, BLM application-processing steps include: notifying of the Governor of LBA receipt, ensuring the LBA conforms with the applicable Resource Management Plan, preparing site-specific environmental analysis, holding a public hearing, consulting with surface-management agencies, the Governor, the Attorney General, and Indian Tribes, and holding a lease sale or rejecting the application. If a sale is held, bidding is open to any qualified bidder and is not limited to the applicant. A coal lease is issued to the highest bidder, if the BLM determines that the high bid meets or exceeds the fair market value of the coal as determined by the BLM's economic evaluation, and if the U.S. Department of Justice determines that no antitrust violations would result from assigning the lease to the high bidder.

Lease Notice:

A provision on a mineral lease that provides more detailed information concerning limitations that already exist in law, lease terms, regulations, or operational orders. A Lease Notice also addresses special items the lessee should consider when planning operations, but does not impose new or additional restrictions (Uniform Format for Oil and Gas Lease Stipulations, March 1989, Rocky Mountain Regional Coordinating Committee). An information [lease] notice has no legal consequences, except to give notice of existing requirements, and may be attached to a lease by the authorized officer at the time of lease issuance to convey certain operational, procedural, or administrative requirements relative to lease management within the terms and conditions of the standard lease form. Information [lease] notices shall not be a basis for denial of lease operations (43 CFR 3101.1-3).

Lease Stipulation:

A provision that modifies standard lease rights and is attached to and made a part of the lease. (Uniform Format for Oil and Gas Lease Stipulations, March 1989, Rocky Mountain Regional Coordinating Committee). The authorized officer may require stipulations as conditions of lease issuance. Stipulations become part of the lease and supersede inconsistent provisions of the standard lease form. Any party submitting a bid is deemed to have agreed to stipulations applicable to the specific parcel (43 CFR 3101.1-3).

Lek:

A traditional courtship display area attended by male Greater Sage-Grouse in or adjacent to sagebrush dominated habitat. A lek is designated based on observations of two or more male Greater Sage-Grouse engaged in courtship displays. Leks are classified based on the following definitions:

- **Occupied Lek** – A lek that has been active during at least one strutting season within the prior 10 years. Occupied leks are protected through prescribed management actions during surface-disturbing activities.
- **Undetermined Lek** – Any lek that has not been documented as being active in the last 10 years, but survey information is insufficient to designate the lek as unoccupied. Undetermined leks are not protected through prescribed management actions during surface-disturbing activities until sufficient documentation is obtained to confirm the lek is occupied. Use of this status should be rare (see “unknown” lek).

- **Unoccupied Lek** – There are two types of unoccupied leks: “destroyed” and “abandoned.” Unoccupied leks are not protected during surface-disturbing activities.
 - Abandoned lek – A lek in otherwise suitable habitat that has not been active during a period of 10 consecutive years. To be designated abandoned, a lek must be “inactive” (see above criteria) in at least four non-consecutive strutting seasons spanning the 10 years. The site of an “abandoned” lek should be surveyed at least once every 10 years to determine whether it has been re-occupied by Greater Sage-Grouse.

Lek – Annual Status:

Lek status is assessed annually based on the following definitions:

- **Active** – Any lek that has been attended by male Greater Sage-Grouse during the strutting season. Acceptable documentation of Greater Sage-Grouse presence includes observation of birds using the site for signs of strutting activity.
- **Inactive** – Any lek where sufficient data suggests that there was no strutting activity throughout a strutting season. Absence of strutting Greater Sage-Grouse during a single visit is insufficient documentation to establish that a lek is inactive. This designation requires documentation of either: (1) an absence of birds on the lek during at least two ground surveys separated by at least 7 days, or (2) ground check of the exact known lek site late in the strutting season (after April 15) that fails to find any sign (droppings/feathers) of strutting activity. Data collected by aerial surveys may not be used to designate inactive status.
- **Unknown** – Leks for which status as active or inactive has not been documented during the course of a strutting season. Except for those leks not scheduled for checks in a particular year, use of this status should be rare. Leks should be checked with enough visits to determine whether it is active or not. It is better to have two good checks every other year and confirm it “inactive” than to check it once every year, and not see birds, but retain the “unknown” status.

Lek Count:

A census technique that documents the actual number of male Greater Sage-Grouse observed attending a lek complex. The following criteria are designed to ensure counts are done consistently and accurately, enabling valid comparisons to be made among data sets. Additional technical criteria are available from the Wyoming Game and Fish Department.

1. Conduct lek counts at 7–10-day intervals over a 3–4-week period after the peak of mating activity. Although mating typically peaks in early April in Wyoming, the number of males counted on a lek is usually greatest in late April or early May when attendance by yearling males increases.
2. Conduct lek counts only from the ground. Aerial counts are not accurate and are not comparable to ground counts.
3. Conduct counts from ½ hour before sunrise to 1 hour after.
4. Count attendance at each lek a minimum of three times annually during the breeding season.

Lek Perimeter:

The outer perimeter of a lek and any associated satellites. Perimeters should be mapped by experienced observers using established protocols for all leks, with larger leks receiving higher priority. Perimeters may vary over time as population levels or habitat and weather conditions

change. However, changes to mapped perimeters should occur infrequently and only if Greater Sage-Grouse use consistently (2+ years) demonstrates the existing perimeter to be inaccurate. A point **within** the lek perimeter must be recorded or calculated as the identifying location for the lek. The point may be the geographic center of the perimeter polygon as calculated through a Geographic Information System exercise or a Global Positioning System point reflecting the center of breeding activity as typically witnessed on the lek.

Lentic:

Standing water riparian-wetland areas such as lakes, ponds, seeps, bogs, and meadows.

Limited Activity Zone:

An area from which surface-disturbing activities are prohibited, temporarily or permanently, for the protection of a resource. Disruptive activities are permissible synonymous with “light human activity levels” as described in the Greater Yellowstone Bald Eagle Management Plan (Greater Yellowstone Bald Eagle Working Group 1996). Day use and low impact activities are allowed at low densities and frequencies. Extended use activities such as oil and gas development, heavy construction, timber harvest, and concentrated use are excluded.

Limited Area:

An area restricted, at certain times, in certain areas, and/or to certain vehicle use. These restrictions may be of any type, but can generally be accommodated within the following types of categories: number of vehicles, type of vehicles, time of season of vehicle use, permitted or licensed use only, use on existing roads and trails, use on designated roads and trails, and other restrictions.

Limited Reclamation Potential:

Areas possessing unique landscape characteristics (e.g., sensitive geologic formations, extremely limiting soil conditions, biological soil crusts, badlands, rock-outcrops) where meeting reclamation requirements can be impractical and/or unrealistic due to physical, biological, and/or chemical challenges. When disturbed, these areas may require extraordinary and/or unconventional reclamation strategies to attain reclamation success.

Locatable Minerals:

Minerals subject to exploration and development via staking (locating) lode or placer mining claims as provided for by the Mining Law of 1872, as amended, and regulated pursuant to 43 CFR Part 3800. This includes deposits of metallic minerals containing gold, silver, and uranium; nonmetallic minerals such as bentonite and gypsum; and uncommon variety minerals not subject to disposal under 43 CFR Part 3600 regulations. There is no royalty to the federal government associated with the extraction of locatable minerals from public lands.

Lotic:

Running water riparian-wetland areas such as rivers, streams and springs.

Major Right-of-Way:

Pipelines 16 inches or greater or surface-disturbing activities greater than 50 feet.

Mineral Entry:

Areas “open to mineral entry” are open to the operation of the mining laws; mining claims may be located, and locatable minerals may be explored and/or developed in these areas. Areas “closed to mineral entry” are closed to the operation of the mining laws; this includes locating of mining claims, and exploration/development of locatable minerals in these areas.

Mineral Materials:

See Salable Minerals.

Mineral Withdrawal:

A formal order that withholds federal lands and minerals from entry under the Mining Law of 1872, as amended, and closes the area to mineral location (i.e., staking of mining claims and sites) and exploration and development pursuant to 43 CFR Subparts 3802 and 3809.

Mining Claims, and Location of Mining Claims:

A selected parcel of federal land, valuable for a specific mineral deposit or deposits (or to be used to process or remove the minerals), for which a claimant has asserted a right of possession under the General Mining Law (of 1872, as amended). A mining claim/site can be located in any parcel for which all minerals are reserved to the federal government, and that are not closed to mineral entry; this includes split estate lands. The claimant's right is restricted to the development and extraction of a mineral deposit. The rights granted by a mining claim protect against a challenge by the United States and other claimants only after the discovery of a valuable mineral deposit. A mining claim/site gives the claimant the royalty-free right to explore for and develop the locatable minerals occurring in the claim, given the claimant follows all applicable state and federal laws and regulations (including those under 43 CFR 3800). This also includes the BLM's annual timely receipt of the claim's Maintenance Fee, Maintenance Fee Waiver (for "small" miners, those who hold 10 or fewer claims), or Affidavit of Work, and that the claim/site has been located correctly and accurately. Mining claims or sites may be located and held by U.S. citizens (born or naturalized) or corporations (these are held to the same standard); non-citizens are not permitted to own or have an interest in mining claims or sites. There is no limit to the number of claims/sites that may be held by a qualified claimant, as long as the requirements of the General Mining Law have been met. There are four types of mining claims/sites: two are mineral in nature—lode claims (for vein-type mineralizations, which generally tend to be higher in grade and more limited in size and extent) and placer claims (for mineralizations that tend to form in lower grades and larger in size and extent); one is strictly for milling (processing) of minerals—mill site claims; and one is strictly for constructing tunnels (to reach or remove minerals)—tunnel site claims. There are 5 types of mining claim/site status:

- **Active:** A mining claim/site for which the BLM has timely received the Maintenance Fee or Affidavit of Work, or received and approved the Maintenance Fee Waiver (for "small" miners, those who hold 10 or fewer claims).
- **Closed:** A mining claim/site that the claimant no longer wishes to hold, and for which the claimant has provided notification of abandonment or relinquishment to the BLM.
- **Pending:** A mining claim/site for which the BLM has received the location notification, but has not yet fully recorded all the claims' pertinent information; there may be a number of reasons for this status.
- **Void:** A mining claim/site for which the BLM has not timely received the annual Maintenance Fee; the claim essentially no longer exists.
- **Valid, or Validity:** A claimant who holds a BLM-recorded mining claim/site is not required to prove the "discovery" of a valuable mineral(s) in that claim, or on land near the claim site (mill or tunnel). However, there may be a number of circumstances in which this assumption of "discovery" may be challenged; these include an impending

withdrawal of public lands that includes the claim/site's parcel. Federal statute does not describe what constitutes a "valuable mineral deposit"; therefore, the federal government adopted the "prudent man rule." This rule was first stated by the Department of the Interior (DOI) in the adjudication of *Castle v. Womble* (19 L.D. 455) in 1894; this holding states "...where minerals have been found and the evidence is of such a character that a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success in developing a valuable mine, the requirements of the statute have been met." The U.S. Supreme Court approved this definition in *Chrisman v. Miller* (197 U.S. 313, 1905). The DOI's Solicitor issued an opinion in 1933 that noted a need for a distinct showing that the mineral could be mined, removed, and marketed at a profit. The marketability test is supplemental to the prudent man rule and considers the economics and market entry of the minerals in the deposit. The claimant is required to show a reasonable prospect of making a profit from the sale of minerals from a claim or group of contiguous claims. DOI decisions require a discovery on each claim based on an actual exposure of the mineral deposit within the claim's boundaries. If a federal agency administers the parcel(s) that the claim/site is located in, it administers an examination of the claim/sites economics, using these same parameters. If the claimant can prove they can mine and market the minerals at a profit, the claim/site is said to be "valid." If the claimant cannot prove this, and the federal agency's examination proves he or she cannot, the location of the claim/site is said to be "invalid" and determined to be void.

Miscellaneous Areas:

Have essentially no soil and support little or no vegetation. This can be a result of active erosion, washing by water, unfavorable soil conditions, or human activities. Some miscellaneous areas can be made productive but only after major reclamation efforts. Map units are designed to accommodate miscellaneous areas, and most map units named for miscellaneous areas have inclusions of soil. If the amount of soil exceeds the standards for inclusions defined in the U.S. Department of Agriculture's *Soils Survey Manual* (1993), the map unit is named as a complex or association of miscellaneous area and soil.

Mitigation:

Includes:

- a. Avoiding the impact altogether by not taking a certain action or parts of an action.
- b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- e. Compensating for the impact by replacing or providing substitute resources or environments.

Mitigation Measures:

Methods or procedures designed to reduce or lessen the adverse impacts caused by management activities.

Motor Vehicle or Motorized Vehicle:

Any device that is moved or propelled by an internal combustion engine or electrically powered motor. It includes, but is not limited to, automobiles, trucks, motorcycles, all-terrain vehicles, motor bikes, motor-scooters and off-road vehicles, whether or not they can be

licensed to operate on public roads. The term does not include vessels or personal mobility assistive devices, such as wheelchairs.

Native American:

The first people living in North and South America. Many groups of people today are Native Americans and have ancestors who lived on these continents for thousands of years before Columbus came. They are also called American Indians, First Americans, Alaska Natives and Native People.

Native American Monitor:

An official representative of a Native American tribe who monitors projects that may affect cultural resources significant to his or her tribe. The Monitor participates and obtains firsthand knowledge of archeological excavations and surface-disturbing activities in areas that are known to have cultural sensitivity or have the potential for cultural sensitivity. The Native American Monitor should be knowledgeable about his or her culture and its traditions, and be familiar with archeological practices, as well as federal and state laws and regulations regarding Native American cultural concerns.

Natural Fire Regime:

The general classification of the role fire would play across a landscape in the absence of modern human mechanical intervention, but including the influence of aboriginal burning (Agee 1993; Brown 1995).

Necessary Tasks (Clause):

Work requiring the use of motor vehicles. Examples include using motor vehicles to repair range improvements, manage livestock, perform geophysical exploration activities and other types of leasable mineral exploration activity (other than casual use), and performing mining claim functions resulting in less than 5 acres of surface disturbance as described in 43 CFR 3809.

Net Conservation Gain:

The actual benefit of gain above baseline conditions.

Nonconsumptive Use:

The use of a resource that does not reduce the supply. For example, wildlife viewing does not reduce the supply of wildlife as opposed to big game hunting, which reduces the supply of big game.

No Surface Occupancy:

A mineral lease stipulation where use or occupancy of the land surface for mineral exploration or development is prohibited to protect identified resource values.

Noxious Weed:

A noxious weed is a legal designation of plants under the Wyoming Weed and Pest Control Act.

Objective:

A description of a desired condition for a resource. Objectives can be quantified and measured and, where possible, have established timeframes for achievement.

Off-Highway Vehicle (OHV):

Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding (1) any nonamphibious registered motorboat; (2) any military, fire, emergency, or law enforcement vehicle being used for emergency purposes; (3) any vehicle whose use is expressly authorized by the authorized officer or otherwise officially approved; (4) vehicles in official use; and (5) any combat or combat support vehicle when used in times of national defense emergencies.

Off-Highway Vehicle (OHV) Management Designations:

Used by federal agencies in the management of OHVs on public lands. Refers to the land use planning decisions that permit, establish conditions for, or prohibit OHV activities on specific areas of public lands. All public lands are required to have OHV designations (43 CFR 8342.1). The CFR requires all BLM-administered public lands to be designated as “open,” “limited,” or “closed” to off-road vehicles and provides guidelines for designation. The definitions of open, limited, and closed are provided in 43 CFR 8340.0-5 (f), (g), and (h), respectively.

Closed: Motorized vehicle travel is prohibited in the area. Access by means other than motorized vehicle, such as mechanized or nonmotorized use, is permitted. Areas are designated closed if closure to all vehicular use is necessary to protect resources, promote visitor safety, or reduce use conflicts (see 43 CFR 8340.0-5).

Open: Motorized vehicle travel is permitted year-long anywhere within an area designated as “open” to OHV use. Open designations are used for intensive OHV use areas where there are no special restrictions or where there are no compelling resource protection needs, user conflicts, or public safety issues to warrant limiting cross-country travel (see 43 CFR 8340.0-5).

Limited:

- a. Motorized vehicle travel within specified areas and/or on designated routes, roads, vehicle ways, or trails is subject to restrictions. The “limited” designation is used where OHV use must be restricted to meet specific resource management objectives. Examples of limitations include number or type of vehicles, time or season of use, permitted or licensed use only, use limited to designated roads and trails, or other limitations if restrictions are necessary to meet resource management objectives, including certain competitive or intensive use areas that have special limitations (see 43 CFR 8340.0-5).
- b. Vehicle travel may be permitted only on roads and vehicle routes designated by the BLM. In areas where final designation has not been completed, vehicle travel is limited to existing roads and vehicle routes as described above. Designations would be posted as appropriate stating:
 1. Vehicle route is open to vehicular travel.
 2. Vehicle route is closed to vehicular travel.
- c. Vehicle travel may be limited by number or type of vehicle. Designations would be posted as appropriate stating:
 1. Vehicle route limited to four-wheel drive vehicles only.
 2. Vehicle route limited to motorbikes only.
 3. Area is closed to over-snow vehicles.
 4. Vehicle travel is limited to licensed or permitted use.
 5. Vehicle travel is limited to time or season of use.

6. Where specialized restrictions are necessary to meet resource management objectives, other limitations also may be developed.

The BLM may place other limitations, as necessary, to protect other resources, particularly in areas with intensive OHV use. Where off-road vehicles are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources, the affected areas shall be immediately closed to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence.

Old Growth Forest:

Ecosystem distinguished by old trees and related structural features. Old growth encompasses the later stages of stand development that typically differ from earlier stages in several ways, including tree size; accumulation of large, dead woody material; number of canopy layers; species composition; and ecosystem function.

Open:

Generally denotes that an area is available for a particular use or uses. Refer to specific program definitions found in law, regulations, or policy guidance for application to individual programs.

Outbreak:

The infestation of a relatively small and contained grouping of trees by bark beetles.

Paleontological Locality:

A geographic point or area where a fossil or associated fossils are found in a related geological context. A paleontological locality is confined to a discrete stratigraphic layer, structural feature, or physiographic area.

Paleontology:

The study of ancient plants and animals now known only from fossil remains.

Perennial Stream:

A stream that flows continuously. Perennial streams generally are associated with a water table in the localities through which they flow (Prichard et al. 1998).

Permitted Use:

The forage allocation by, or under guidance of, an applicable land use plan for livestock grazing in an allotment under a permit or lease, expressed in AUMs.

Pest:

With the exception of vascular plants classified as invasive plant species, a pest can be any biological life form that poses a threat to human or ecological health and welfare. For the purposes of this planning effort, an “animal pest” is any vertebrate or invertebrate animal subject to control by Animal and Plant Health Inspection Service (APHIS). APHIS is currently the BLM’s authorized agent for controlling “animal pests.” For this reason, “animal pests” is considered a subset of pest.

Planning Area:

A geographic area for which land use and resource management plans are developed and maintained.

Potential Fossil Yield Classification:

Geologic units are classified according to the Potential Fossil Yield Classification system, usually at the formation or member level, based on the relative abundance of significant fossils and their sensitivity to adverse impacts. The classification uses a ranking of 1 through 5, with Class 5 assigned to units with a very high potential for fossils. The classifications are described below.

Class 1 – Very Low: Igneous or metamorphic geologic units, or other units not likely to contain recognizable fossil remains. Management concern is negligible for Class 1 units and mitigation requirements are rarely necessary.

Class 2 – Low: Sedimentary geologic units that are not likely to contain vertebrate fossils or significant nonvertebrate fossils. Management concern is low for Class 2 units and mitigation requirements are not likely.

Class 3 – Moderate or Unknown: Fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence; or sedimentary units of unknown fossil potential. Management concern may extend across the entire range of management. Ground-disturbing activities require sufficient assessment to determine whether significant resources occur in the area of the proposed action, and whether the action could affect the paleontological resources. Predisturbance surveys, monitoring, or avoidance procedures may be necessary.

Class 4 – High: Geologic units containing known occurrences of significant fossils, but these occurrences may vary in local abundance and predictability. Management concern is moderate to high, depending on the potential impacts of the proposed action and local geologic conditions. Predisturbance field surveys are often needed, and avoidance or onsite monitoring may often be necessary during project activities.

Class 5 – Very High: Highly fossiliferous geologic units that consistently and predictably produce significant fossils, and that are at risk of human-caused adverse impacts or natural degradation. Class 5 areas merit a high level of management focus. Mitigation of ground-disturbing activities, including predisturbance surveys, on-site monitoring, or avoidance procedures, are nearly always necessary. These units are often the focus of illegal collection activities. Special management designations may be appropriate for protection or interpretation.

Potential Natural Community:

The biotic community that would become established if all successional sequences were completed without interference by humans under the present environmental conditions. Natural disturbances are inherent in development.

Prairie Dog “Complex”:

Defined as a cluster of two or more prairie dog towns within 3 kilometers of each other (Clark and Stromberg 1987) and bounded by either natural or artificial barriers (Whicker and Detling 1988) which effectively isolate one cluster of colonies from interacting/interchanging with another. Prairie dogs may commonly move among colonies of a cluster, and thereby foster reproductive/genetic viability, but exhibit little emigration/immigration between clusters. A cluster may include some currently unoccupied, though physically suitable (e.g., vegetation, soils, topography), land immediately adjacent to occupied colonies that support other prairie

dog-associated (ecosystem function), obligate or facultative species (e.g., swift fox, mountain plover, burrowing owl).

Prehistory/Prehistoric:

Information about past events prior to the recording of events in writing. The period of prehistory differs around the world depending upon when written records became common in a region.

Prescribed Burning:

Application of fire to wildland fuels in either their natural or modified state under specified environmental conditions that allow the fire to be confined to a predetermined area and at the same time to produce the fire intensity and rate of spread required to attain planned resource management objectives.

Prescribed Fire:

A wildland fire originating from a planned ignition to meet specific objectives identified in a written, approved, prescribed fire plan for which National Environmental Policy Act (NEPA) requirements (where applicable) have been met prior to ignition.

Primitive and Unconfined Recreation:

Nonmotorized, nonmechanized (except as provided by law), and undeveloped types of recreational activities. Bicycles are considered mechanized transport.

Produced Water:

Groundwater removed to facilitate the extraction of minerals, such as coal, oil, or gas.

Proper Functioning Condition:

See *Riparian/Wetland Functionality Classification*.

Proper Grazing:

The practice of managing forage use by grazing animals at a sustainable level that maintains rangeland health. Proper grazing will maintain or increase plant cover, including residue, which acts to slow down or reduce runoff, increase water infiltration, and keep erosion and sedimentation at or above acceptable levels within the potential of ecological sites within a given geographic area (e.g., watershed, grazing allotment).

Public Land:

Any land and interest in land (surface and mineral) owned by the United States within the several states and administered by the Secretary of the Interior through the BLM, without regard to how the United States acquired ownership, except:

1. lands located on the Outer Continental Shelf; and
2. lands held for the benefit of Indians, Aleuts, and Eskimos.

Range Improvement Project:

A structural improvement requiring placement or construction to facilitate management or control distribution and movement of grazing or browsing animals. Such improvements may include, but are not limited to, fences, wells, troughs, reservoirs, water catchments, pipelines, and cattleguards. The project also may include a practice or treatment that improves rangeland condition and/or resource production for multiple use. Nonstructural types of projects may include, but are not limited to, seeding and plant control through chemical, mechanical, and biological means or prescribed burning.

Rangeland:

Land on which the native vegetation is predominantly grasses, grass-like plants, forbs, or shrubs suitable for grazing or browsing. This includes lands revegetated naturally or artificially when routine management of that vegetation is accomplished mainly through manipulation of grazing. Rangelands include natural grasslands, savannas, shrublands, most deserts, tundra, alpine communities, coastal marshes, and wet meadows.

Rangeland Health:

The degree to which the integrity of the soil and ecological processes of rangeland ecosystems are sustained. This is generally synonymous with Land Health.

Raptor:

Bird of prey with sharp talons and a strongly curved beak, such as hawks, falcons, owls, vultures, and eagles.

Raptor Species of High Federal Interest or Conservation Concern:

Bird of prey species that the U.S. Fish and Wildlife Service (USFWS) and the BLM have identified as high interest species. Species selection is based on national importance or public value; the potential for regional decline, regional jeopardy, or long-term impact; and status as an indicator species.

Reclamation:

Taking measures following disturbance of public lands caused by operations to meet applicable performance standards and achieve conditions required by the BLM at the conclusion of operations. Components of reclamation include, where applicable: (1) isolation, control, or removal of acid-forming, toxic, or deleterious substances; (2) regrading and reshaping to conform with adjacent landforms, facilitate revegetation, control damage, and minimize erosion; (3) rehabilitation of fisheries or wildlife habitat; (4) placement of growth medium and establishment of self-sustaining revegetation; (5) removal or stabilization of buildings, structures, or other support facilities; (6) plugging of drill holes and closure of underground workings; and (7) providing for post-mining monitoring, maintenance, or treatment. (43 CFR 3809.5).

Initial Reclamation: Occurs as soon as possible after the surface is disturbed.

Interim Reclamation: Occurs on all disturbed areas not needed for active support to minimize the environmental impacts of development on other resources and uses.

Final Reclamation: Occurs at the end of the project, and the character and productivity of the land and water are restored.

Reclamation Suitability:

The inherent ability of the soil to recover from impacts; often referred to as soil resilience.

Reclamation Suitability (Source of Reclamation Material):

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings do not apply to quarries or other mined areas that require an off-site source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reclaimed soil. These

properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Recreation Management Areas:

Units within a planning area guiding recreation management on public lands having similar recreation related issues and concerns. There are two types of recreation management areas:

Extensive Recreation Management Area (ERMA): an administrative unit that requires specific management consideration in order to address recreation use, demand, or recreation and visitor services program investments. ERMAs are managed within the recreation program to support and sustain the principal recreation activities and the associated qualities and conditions of the ERMA, commensurate with the management of other resources and resource uses. Management actions within ERMAs focus on access to the public lands, conflict resolution, resource protection and visitor health and safety.

Special Recreation Management Area (SRMA): an administrative unit where the existing or proposed recreation opportunities and recreation setting characteristics are recognized for their unique value, importance and/or distinctiveness, especially as compared to other areas used for recreation. SRMAs are areas where recreation is recognized as the predominant land use plan focus, where specific recreation opportunities and recreation setting characteristics are managed and protected on a long-term basis.

Rehabilitation:

Altering or reclaiming a degraded habitat in order to improve ecological function.

Required Design Features (RDF):

Required for certain activities in Greater Sage-Grouse habitat. RDFs establish the minimum specifications for certain activities to help mitigate adverse impacts. However, the applicability and overall effectiveness of each RDF cannot be fully assessed until the project level when the project location and design are known. Because of site-specific circumstances, some RDFs may not apply to some projects (e.g., a resource is not present on a given site) and/or may require slight variations (e.g., a larger or smaller protective area). All variations in RDFs would require that at least one of the following be demonstrated in the NEPA analysis associated with the project/activity:

- A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g., due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable;
- An alternative RDF, a state-implemented conservation measure, or plan-level protection is determined to provide equal or better protection for Greater Sage-Grouse or its habitat; or
- A specific RDF will provide no additional protection to Greater Sage-Grouse or its habitat.

Reserve Common Allotment:

A unit of public land that will not have term grazing permits issued. Such an allotment would only be grazed on a temporary, nonrenewable basis to provide temporary grazing to rest other areas following wildfire or habitat treatments, or to allow for more rapid attainment of rangeland health. The allotment must be of sufficient size to be managed as a discrete unit. Reserve common allotments should be distributed throughout the planning area.

Rest (livestock grazing):

Leaving an area ungrazed, thereby foregoing grazing of one forage crop. Normally, rest implies absence of grazing for a full growing season or during a critical portion of plant development; (e.g., seed production).

Right-of-Way (ROW):

A ROW grant is an authorization to use a specific piece of public land for a specific project, such as roads, pipelines, transmission lines, and communication sites. The grant authorizes rights and privileges for a specific use of the land for a specific period of time.

Riparian:

A form of wetland transition between permanently saturated wetlands and upland areas. These areas exhibit vegetation or physical characteristics reflective of permanent surface or subsurface water influence. Lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels are typical riparian areas. Included are ephemeral streams that have vegetation dependent upon free water in the soil. All other ephemeral streams are excluded.

Riparian/Wetland Functionality Classification:

Functional-at-Risk: Riparian/wetland areas that are in functional condition, but an existing soil, water, or vegetation attribute makes them susceptible to degradation.

Proper Functioning Condition (PFC): A riparian or wetland area is considered to be in PFC when adequate vegetation, landform, or large woody debris is present to do the following:

- Dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality
- Filter sediment, capture bedload, and aid floodplain development
- Improve floodwater retention and groundwater recharge
- Develop root masses that stabilize stream banks against cutting action
- Develop diverse ponding and channel characteristics to provide the habitats and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses
- Support greater biodiversity

Nonfunctional: Riparian or wetland areas that clearly are not providing adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high flows and thus are not reducing erosion, improving water quality, and so on, as listed above. The absence of certain physical attributes, such as a floodplain where one should be, is an indicator of nonfunctioning conditions.

Unknown: Riparian or wetland areas that the BLM lacks sufficient information on to make any form of determination.

Rock outcrop:

As used in geology: That part of an in-situ geological formation or structure that appears at the surface of the earth. In-situ rock (often called “bedrock”) that is exposed and visible at the earth’s surface.

As used in soil science: Exposures of bare bedrock other than lava flows and rock-lined pits. If needed, map units can be named according to the kind of rock: rock outcrop, chalk; rock outcrop, limestone; rock outcrop, gypsum. Many rock outcrops are too small to be delineated

as areas on soil maps but can be shown by spot symbols. Some areas are large, broken by only small areas of soil. Most rock outcrops are hard rock, but some are soft.

Rock Shelter:

A shallow, cave-like opening at the base of a bluff or cliff.

ROW Avoidance Areas:

Areas where adverse routing factors exist. ROWs either will not be granted in these areas, or—if granted—will be subject to stringent terms and conditions. In other words, ROWs would be restricted (but not necessarily prohibited) in these avoidance areas.

Salable Minerals:

Also called Mineral Materials. Common variety minerals, such as sand, gravel, common decorative or building stone, pumice, pumicite, and common clay, that are not obtainable under the mining or leasing laws, but can be acquired under the Mineral Materials Act of 1947, as amended. These minerals are used mainly for construction purposes, like buildings and roads. Salable minerals are disposed of by sales to the public for a set royalty by the ton or cubic yard, or through free-use permits to government agencies or qualified nonprofit organizations.

Saturated Soil:

A condition in which all voids between soil particles are temporarily or permanently filled with water.

Scenic Area:

An area whose landscape character exhibits a high degree of variety and harmony among the basic elements which results in a pleasant landscape to view.

Scoria:

See Clinker. Local term often used in the Powder River Basin area for “clinker.” Very different rock type from true scoria, which is volcanic in origin, although some clinker can appear very similar to true scoria which is how the term came to be used for clinker in the Powder River Basin area.

Seasonal Ranges:

The Wyoming Game and Fish Department has identified various ranges for big game species. These ranges are defined as follows:

Summer or Spring-Summer-Fall: A population or portion of a population of animals uses the documented habitats within this range annually from the end of the previous winter to the onset of persistent winter conditions.

Severe Winter Relief: A documented survival range, which may or may not be considered a crucial range area as defined above. It is used to a great extent, but only in extremely severe winters. It may lack habitat characteristics that would make it attractive or capable of supporting major portions of the population during normal years, but is used by and allows at least a significant portion of the population to survive the occasional extremely severe winter.

Winter: A population or portion of a population of animals annually uses the documented suitable habitat sites within this range in substantial numbers during the winter period only.

Winter/Year-long: A population or a portion of a population of animals makes general use of the documented suitable habitat sites within this range on a year-round basis. During the winter months, there is a significant influx of additional animals into the area from other seasonal ranges.

Year-long: A population or substantial portion of a population of animals makes general use of the suitable documented habitat sites within the range on a year-round basis. On occasion, animals may leave the area under severe conditions.

Calving Areas (Parturition): Documented birthing areas commonly used by females. They include calving areas, fawning areas, and lambing grounds. These areas may be used as nurseries by some big game species.

Section 106 of the National Historic Preservation Act:

“The head of any federal agency having direct or indirect jurisdiction over a proposed federal or federally assisted undertaking in any state and the head of any federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register. The head of any such federal agency shall afford the Advisory Council on Historic Preservation established under Title II of this Act a reasonable opportunity to comment with regard to such undertaking” (16 U.S.C. 47 df).

Security Habitat:

The area to which wildlife retreat when disturbance in their usual range is intensified. Each species tends to be most comfortable or secure within habitat blocks larger than a minimum area. The Fortification Creek Resource Management Plan amendment defined elk security habitat as contiguous habitat of 250 acres or greater that is more than 0.5 mile or not visible from an open road.

Sensitive Sites or Resources:

Significant cultural resources that are or may be eligible for nomination to the National Register of Historic Places.

Sensitive Species:

As designated by the BLM State Director, includes species that are under status review, have small or declining populations, live in unique habitats, or require special management. BLM Manual 6840 provides policy and guidance for special status species management. The BLM Wyoming Sensitive Species Policy and List are provided in a memorandum updated annually. The primary goals of the BLM Wyoming policy include maintaining vulnerable species and habitat components in functional BLM ecosystems and preventing a need for species listing under the Endangered Species Act.

Seral Stage:

One of a series of plant communities that follows another in time on a specific ecological site.

Setting:

The physical environment of a historic property and how the property evokes a sense of feeling and association with past events. Accordingly, setting refers to the character of the place in which the property played its historic role. It involves how, not just where, the

property is situated and its relationship to surrounding features and open space. These features and their relationships should be considered not only within the exact boundaries of the property, but also between the property and its surroundings.

Significant Paleontological Resource (also Significant Fossil Resource):

Any paleontological resource that is considered to be of scientific interest, including most vertebrate fossil remains and traces, and certain rare or unusual invertebrate and plant fossils. A significant paleontological resource is considered to be scientifically important because it is a rare or previously unknown species, it is of high quality and well-preserved, it preserves a previously unknown anatomical or other characteristic, provides new information about the history of life on Earth, or has identified educational or recreational value.

Silviculture:

The art of producing and tending a forest; the application of knowledge of silvics in the treatment of a forest; the theory and practice of controlling forest establishment, composition, structure, and growth.

Site:

A location, place. A term used by archeologists for places that prehistoric and historic people lived in or used. Sites are places where humans left things behind.

Soil Mapping Unit—Map Units:

A map unit is a collection of areas defined and named the same in terms of their soil components, miscellaneous areas or both. Each map unit differs in some respect from all others in a survey area and is uniquely identified on a soil map. Each individual area on the map is a *delineation*. Map units consist of one or more components.

An individual component of a map unit represents the collection of polypedons or parts of polypedons that are members of the taxon or a kind of miscellaneous area (<http://www.nrcs.usda.gov/wps/portal/nrcs/site/national/home/>).

Special Recreation Management Areas (SRMA):

See *Recreation Management Areas*.

Special Recreation Permit (SRP):

An authorization that allows specified recreational uses of the public lands and related waters as required by 43 CFR 2932.11a(1). SRPs are issued as a means to manage visitor use and to protect natural and cultural resources and as a mechanism to authorize commercial, competitive, and vending use; organized group activities and events; and individual or group use of special areas. Commercial SRPs are also issued as a means to provide a fair return for the commercial recreational use of public lands.

Special Status Species:

Species proposed or candidates for listing or officially listed as Threatened or Endangered under the provisions of the Endangered Species Act; those listed by a state in a category implying potential endangerment or extinction; and those designated by the State Director as sensitive (BLM 2008b).

Split Estate:

Surface land and mineral estate of a given area under different ownerships. Frequently, the surface will be privately owned and the minerals federally owned.

Stabilization:

Minimize sheet and rill erosion on or adjacent to the reclaimed area. There shall be no evidence of mass wasting, head cutting, large rills or gullies, down cutting in drainages, or overall slope instability on or adjacent to the reclaimed area (Instruction Memorandum No. WY 2012-032).

Stakeholder:

Entities whose interests may be affected as a result of project execution or project completion.

Stratigraphy:

The science of studying layers of materials, as in rock layers in the earth or deposits in archeological sites. Usually, the layer on the bottom is the oldest, and the layer on the top is the youngest. Cultural remains and soils/sediments become buried over time. Rocks, and soil or sediments composing different layers are often different from one another, such as different colors, or containing different clasts (pieces of rock) and/or different fossils; however, different layers can also be very similar.

Subsoil:

Technically, the subsoil includes the B horizon. This is roughly the part of the solum below the organic topsoil and above the rocky parent material of the C horizon. When suitable, the subsoil may be salvaged to supplement the topsoil for plant establishment.

Suitable Habitat (Habitat Assessment Framework [HAF]):

Categorized in quality-based descriptions, including marginal and suitable.

- Marginal habitats are described as maintaining 5 to 15 percent sagebrush canopy cover.
- Suitable habitats are described as maintaining 15 to 25 percent sagebrush canopy cover.

Where sagebrush canopy covers would be above or below these percentages, the habitat would be categorized as “unsuitable.”

Suitable Sage-Grouse Habitat (Wyoming Executive Order):

Habitat within the mapped occupied range of the species that maintains *greater than 5 percent canopy* sagebrush cover, or sagebrush escape cover (i.e., greater than 10 percent canopy) is within 60 meters of wet meadow, alfalfa or other suitable forbs areas. Areas below the 5 percent sagebrush canopy cover, and outside of the wet meadow example, would be considered “unsuitable” for Greater Sage-Grouse.

Surface-disturbing Activities (or Surface Disturbance):

An action that alters the vegetation, surface/near surface soil resources, and/or surface geologic features beyond natural site conditions and on a scale that affects other public land values. Examples of surface-disturbing activities include: operation of heavy equipment to construct well pads, roads, pits and reservoirs; installation of pipelines and powerlines; and several types of vegetation treatments (e.g., prescribed fire). Surface-disturbing activities may be either authorized or prohibited.

Threatened Species:

Any species that is likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.

Topsoil:

The biologically active, upper part of the soil profile, being the most favorable material for plant growth. The topsoil includes the O and A horizons.

Traditional Cultural Property:

A cultural property eligible for inclusion in the National Register of Historic Places because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community. "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property is derived from the role the property plays in a community's historically rooted beliefs, customs, and practices.

Transfer of Grazing Preference:

The BLM's approval of an application to transfer grazing preference from one party to another or from one base property to another, or both. Grazing preference means a superior or priority position against others for the purposes of receiving a grazing permit or lease. This priority is attached to base property owned or controlled by the permittee or lessee.

Uranium:

Pure uranium (elemental form) is a silvery white metal, and is weakly radioactive. It is malleable and ductile (can be bent and shaped), slightly paramagnetic (slightly attracted to a strong magnetic field), and a poor electrical conductor. It is harder than most elements, but a little softer than steel. It has a very high density—about 70 percent denser than lead, and slightly less dense than gold. Uranium is the heaviest naturally-occurring element available in large quantities; it is more common in nature than was originally thought. Uranium metal oxidizes in air, becoming coated with a dark layer of uranium oxide. Uranium's reactivity increases with increasing temperature. Its numerous oxidation states allow for formation of a variety of compounds, including oxides, fluorides, chlorides, bromides, iodides, hydrides, carbonates, carbides, nitrides, and phosphates. Uranium can exist in aqueous solutions as various ions, with oxidation state +6 (as the UO_2^{2+} ion, yellow in color) the most stable. Uranium and its' compounds are highly toxic, both from chemical and radiological standpoints.

Usable Water:

Water containing less than 10,000 parts per million total dissolved solids.

Valid Existing Rights:

Documented, legal rights or interests in the land that allow a person or entity to use said land for a specific purpose and that are still in effect. Such rights include but are not limited to fee title ownership, mineral rights, rights-of-way, easements, permits, and licenses. Such rights may have been reserved, acquired, leased, granted, permitted, or otherwise authorized over time.

Viewshed:

Used in Visual Resource Management (VRM) to describe "...landscape that can be seen under favorable atmospheric conditions from a viewpoint (key observation point) or along a transportation corridor" (BLM 1984).

Visual Resource Management (VRM) Classes:

The objectives of each VRM Class are as follows:

- **Class I:** To preserve the existing character of the landscape. The level of change to the characteristic landscape should be very low and must not attract attention. It is applied to wilderness and wilderness study areas, some natural areas, wild portions of Wild and Scenic Rivers, and other similar situations in which management activities are to be restricted.
- **Class II:** To retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Proposed alterations should be designed so as to retain the existing character of the landscape. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.
- **Class III:** To partially retain the existing character of the landscape. Contrasts to the basic elements (form, line, color, and texture) caused by a management activity may be evident and begin to attract attention in the characteristic landscape; however, the changes should remain subordinate to the existing characteristic landscape. The level of change to the characteristic landscape should not exceed the moderate threshold.
- **Class IV:** To provide for management activities that require major modification of the existing character of the landscape. Contrasts may attract attention and be a dominant feature of the landscape in terms of scale; however, changes should repeat the basic elements (form, line, color, and texture) inherent in the characteristic landscape. The level of change to the characteristic landscape can be high.

Visual Resources:

The visible physical features of a landscape (topography, water, vegetation, animals, structures, and other features) that constitute the scenery of an area.

WAFWA Management Zone Greater Sage-Grouse Conservation Team:

WAFWA management zones will be used to identify and address cross-state issues, such as regional mitigation and adaptive management monitoring and response, through WAFWA Management Zone Greater Sage-Grouse Conservation Teams (Teams). These Teams will convene and respond to issues at the appropriate scale, and will utilize existing coordination and management structures to the extent possible.

Watershed:

See *Basin*.

Wetlands:

Areas that are inundated or saturated by surface or groundwater often and long enough to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. BLM Manual 1737, Riparian-Wetland Area Management (BLM 1992), includes marshes, shallow swamps, lakeshores, bogs, muskegs, wet meadows, estuaries, and riparian areas as wetlands.

Wild and Scenic River:

A river or portion of a river that is part of a national system of congressionally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural and other similar values and are preserved in a free-flowing condition. The system consists of three types of streams:

1. Recreation – rivers or sections of rivers that are readily accessible by road or railroad, may have some development along their shorelines, and may have undergone some impoundments or diversions in the past;
2. Scenic – rivers or sections of rivers free of impoundments with shorelines or watersheds still largely undeveloped but accessible in places by roads; and
3. Wild – rivers or sections of rivers free of impoundments and generally inaccessible except by trails, with watersheds or shorelines essentially primitive and waters unpolluted.

Wilderness (area):

A unit designated by Congress for inclusion in the National Wilderness Preservation System.

Wilderness Characteristics:

Wilderness characteristics are discussed in Section 2(c) of the Wilderness Act of 1964 (and incorporated into the Federal Land Policy and Management Act), which states: “A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected by the forces of nature, with the imprint of man’s work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.”

Wilderness Study Area:

An area inventoried, found to have wilderness characteristics, and managed to preserve those characteristics under authority of the review of public lands required by Section 603 of the Federal Land Policy and Management Act of 1976. During the period of review or “study,” Wilderness Study Areas are managed so as not to impair the suitability of such areas for preservation as wilderness.

Wildfire:

Unplanned ignition of a wildland fire (such as a fire caused by lightning or, volcano, or unauthorized and accidental human caused fires) and escaped prescribed fires.

Wildland Fire:

A general term describing any non-structure fire that occurs in the wildland.

Wildland Industrial Interface:

The area where industrial development meets or intermingles with undeveloped wildland.

Wildland Urban Interface:

The Healthy Forest Restoration Act 2003 defines wildland urban interface (section 101) as an area within or adjacent to an at-risk community that has been identified by a community in its wildfire protection plan or, for areas that do not have such a plan, an area extending (1) 0.5 mile from the boundary of an at-risk community; (2) 1.5 miles when other criteria are met (e.g., a sustained steep slope or a geographic feature aiding in creating an effective fire break or is condition class III land); or (3) is adjacent to an evacuation route.

Wildlife Habitat Management Area:

Special management areas that are designed to protect or preserve habitat for wildlife. The environment in these areas is unique in some respects, and it is therefore desirable to apply different management prescriptions to these areas from those of the surrounding public lands. The integration of different land management goals, objectives, and actions will be implemented to ensure that the integrity of these areas will be maintained (Record of Decision and Approved Rawlins Resource Management Plan, G-21, BLM).

Wildlife Monitoring and Protection Plan:

A plan that is developed with a goal of avoiding or minimizing impacts on wildlife by monitoring wildlife population trends and by developing appropriate mitigation actions. A Wildlife Monitoring and Protection Plan is often produced in conjunction with an Environmental Impact Statement. These plans are intended to help the BLM identify problems, design project plans, monitor decisions, and make recommendations to adjust management actions as they relate to wildlife protection.

Winter Concentration Area:

During winter, Greater Sage-Grouse feed almost exclusively on sagebrush leaves and buds. Suitable winter habitat requires sagebrush above snow. Greater Sage-Grouse tend to select wintering sites where sagebrush is 10–14 inches above the snow. Sagebrush canopy cover utilized by Greater Sage-Grouse above the snow may range from 10 to 30 percent. Foraging areas tend to be on flat to generally southwest-facing slopes or on ridges where sagebrush height may be less than 10 inches but the snow is routinely blown clear by wind. When these conditions are met, Greater Sage-Grouse typically gain weight over winter. In most cases, winter is not considered limiting to Greater Sage-Grouse. Under severe winter conditions Greater Sage-Grouse will often be restricted to tall stands of sagebrush often located on deeper soils in or near drainage basins. Under these conditions, winter habitat may be limiting. On a landscape scale, winter habitats should allow Greater Sage-Grouse access to sagebrush under all snow conditions.

Large numbers of Greater Sage-Grouse have been documented to persistently use some specific areas characterized by the habitat features outlined above. These areas should be delineated as “winter concentration areas.” Winter concentration areas do not include all winter habitats used by Greater Sage-Grouse, nor are they limited to narrowly defined “severe winter relief” habitats. Delineation of these concentration areas is based on determination of the presence of winter habitat characteristics confirmed by repeated observations and sign of large numbers of Greater Sage-Grouse. The definition of “large” is dependent on whether the overall population is large or small. In core population areas, frequent observations of groups of 50+ Greater Sage-Grouse meet the definition, while in marginal populations group size may be 25+. Consultation and coordination with the Wyoming Game and Fish Department is required when delineating winter concentration areas.

Withdrawal:

Removal or withholding of public lands, by statute or Secretarial order, from operation of some or all of the public land laws. A mineral withdrawal is the closing of an area to locatable mineral location and development activities.

Woodland:

Forest lands not included in the commercial forest land allowable cut base. These lands include both commercial and noncommercial forest lands. Also included are those lands

formerly defined as noncommercial forest lands and those that cannot be reforested within 15 years (now Category I and II lands).

Yellowcake:

The solid form of mixed uranium oxides, produced from the milling (refining) of uranium ore. The proportion of the various uranium oxides, and impurities, present leads to color variations from bright yellow to orange to dark green or black. The higher the temperature at which the material is dried (lower level of hydration), and the greater the impurities, the darker the dried product. Higher drying temperatures also produce a less soluble material. Yellowcake produced by many modern mills is often brown or black, rather than yellow; the name is still used, and came from the color and texture of the material produced in early mills. Yellowcake is commonly referred to as U_3O_8 and is assayed as pounds U_3O_8 equivalent; often, it comprises approximately 85 percent U_3O_8 . This fine powder is packaged in drums at the mill and then transported to a uranium conversion facility. These facilities transform it into uranium hexafluoride, in preparation for fabricating nuclear reactor fuel. There are other uses for uranium, such as in medicine, science, biology, etc., and these may require a different conversion process, or another conversion process after the uranium hexafluoride is prepared.

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Chapter 7. References

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Bibliography

- Agee, J.K. 1993. Fire Ecology of Pacific Northwest Forests. Island Press, Washington, DC.
- Baruch-Mordo, S., J.S. Evans, J.P. Severson, D.E. Naugle, J.D. Maestas, J.M. Kiesecker, M.I. Falkowski, C.A. Hagen, and K.P. Reese. 2013. Saving Sage-grouse from the Trees: A Proactive Solution to Reducing a Key Threat to a Candidate Species. *Biological Conservation* 167:233-241.
- BLM (Bureau of Land Management). 1980. Middle Fork Powder River Habitat Management Plan (WYO-061-WHA-8). U.S. Department of the Interior, Bureau of Land Management.
- BLM. 1984. BLM Manual 8400, Visual Resource Management. U.S. Department of the Interior, Bureau of Land Management.
- BLM. 1986a. Buffalo Resource Area, Wetlands Habitat Management Plan (WY-060-WHA-T1). U.S. Department of the Interior, Bureau of Land Management.
- BLM. 1986b. South Bighorns Habitat Management Plan (WY-060-WHA-T7). U.S. Department of the Interior, Bureau of Land Management.
- BLM. 1989. BLM Handbook 1741-1, Fencing. U.S. Department of the Interior, Bureau of Land Management.
- BLM. 1992. BLM Manual 1737, Riparian-Wetland Area Management. U.S. Department of the Interior, Bureau of Land Management.
- BLM. 2003a. Assessing the Potential for Renewable Energy on Public Lands. U.S. Department of the Interior, Bureau of Land Management and Department of Energy.
- BLM. 2003b. Final Record of Decision, Environmental Impact Statement and Proposed Plan Amendment for the Powder River Basin Oil and Gas Project, Wyoming-070-02-065. U.S. Department of the Interior, Bureau of Land Management. April.
- BLM. 2004a. Bald Eagle Biological Evaluation. Cheyenne, Wyoming. U.S. Department of the Interior, Bureau of Land Management.
- BLM. 2004b. BLM National Greater Sage-Grouse Habitat Conservation Strategy. U.S. Department of the Interior, Bureau of Land Management. November.
- BLM. 2005. Final Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States. Volumes 1-3. U.S. Department of the Interior, Bureau of Land Management. Available online: <http://www.windeis.anl.gov/eis/index.cfm>.
- BLM. 2006. Black-footed Ferret Biological Evaluation. U.S. Department of the Interior, Bureau of Land Management. Cheyenne, Wyoming.
- BLM. 2007a. BLM Handbook H-1742-1, Burned Area Emergency Stabilization and Rehabilitation Handbook. U.S. Department of the Interior, Bureau of Land Management. Available online: http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/blm_handbook.Par.52739.File.dat/h1742-1.pdf.

- BLM. 2007b. Department of the Interior Departmental Manual, Part 517: Pesticides. U.S. Department of the Interior, Bureau of Land Management.
- BLM. 2007c. Final Environmental Impact Statement for Vegetation Treatments on Bureau of Land Management Lands in 17 Western States. U.S. Department of the Interior, Bureau of Land Management.
- BLM. 2007d. Mountain Plover Biological Evaluation. U.S. Department of the Interior, Bureau of Land Management. Cheyenne, Wyoming.
- BLM. 2007e. Statewide Programmatic Biological Assessment for the Ute Ladies'-Tresses Orchid (*Spiranthes diluvialis*). U.S. Department of the Interior, Bureau of Land Management, Wyoming State Office.
- BLM. 2008a. Black-tailed Prairie Dog Biological Evaluation. U.S. Department of the Interior, Bureau of Land Management. Cheyenne, Wyoming.
- BLM. 2008b. BLM Manual 6840, Special Status Species Management. U.S. Department of the Interior, Bureau of Land Management.
- BLM. 2008c. Final Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States, Volume I: Programmatic Analysis. Prepared by U.S. Department of the Interior, Bureau of Land Management, U.S. Department of Agriculture-Forest Service, and EMPSi (Environmental Management and Planning Solutions, Inc.). Available online: http://www.blm.gov/wo/st/en/prog/energy/geothermal/geothermal_nationwide.html. Accessed on June 21, 2009.
- BLM. 2009a. Final Mineral Occurrence and Development Potential Report, Buffalo Field Office. U.S. Department of the Interior, Bureau of Land Management.
- BLM. 2009b. Instruction Memorandum No. 2010-022, Managing Structures for the Safety of Sage-grouse, Sharp-tailed Grouse, and Lesser Prairie-chicken. U.S. Department of the Interior, Bureau of Land Management. Available online: http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2010/IM_2010-022.html. December 2.
- BLM. 2009c. Summary of the Analysis of the Management Situation, Buffalo Resource Management Plan Revision. U.S. Department of the Interior, Bureau of Land Management. Available online: <http://www.blm.gov/wy/st/en/programs/Planning/rmps/buffalo/docs.html>.
- BLM. 2010. Cultural Class I Regional Overview for the Buffalo Planning Area. U.S. Department of the Interior, Bureau of Land Management.
- BLM. 2011a. Fortification Creek Area Resource Management Plan Amendment/Environmental Assessment. WY-070-EA08-135. U.S. Department of the Interior, Bureau of Land Management.
- BLM. 2011b. Interagency Standards for Fire and Fire Aviation Operations Red Book. U.S. Department of the Interior, Bureau of Land Management.

- BLM. 2012. BLM Manual 6320, Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process (Public). U.S. Department of the Interior, Bureau of Land Management.
- BLM. 2015a. Geographic Information System Data. U.S. Department of the Interior, Bureau of Land Management.
- BLM. 2015b. Proposed Resource Management Plan and Final Impact Statement for the Buffalo Field Office Planning Area. U.S. Department of the Interior, Bureau of Land Management. May.
- Brown, J.K. 1995. Fire Regimes and Their Relevance to Ecosystem Management, in Proceedings of Society of American Foresters National Convention, Anchorage, Alaska. Sept. 18-22, 1994. Society of American Foresters. Washington, D.C.
- Cagney, J., E. Bainter, B. Budd, T. Christiansen, V. Herren, M. Holloran, B. Rashford, M. Smith, and J. Williams. 2010. Grazing Influence, Objective Development, and Management in Wyoming's Greater Sage-Grouse Habitat. Cooperative Extension Service Bulletin B-1203, University of Wyoming, Laramie, Wyoming.
- Clark, T.W., and M.R. Stromberg. 1987. Mammals in Wyoming. University of Kansas – Museum of Natural History. Lawrence, Kansas. Pages 108-111.
- Connelly, J.W., K.P. Reese, and M.A. Schroeder. 2003. Monitoring of Greater Sage-Grouse Habitats and Populations. Station Bulletin 80. College of Natural Resources Experiment Station, University of Idaho, Moscow, Idaho.
- Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to Manage Sage Grouse Populations and Their Habitats. Wildlife Society Bulletin 28(4):967-985.
- Connelly, J.W., S.T. Knick, M.A. Schroeder, and S.J. Stiver. 2004. Conservation Assessment of Greater Sage-Grouse and Sagebrush Habitat. Western Association of Fish and Wildlife Agencies.
- DOI (U.S. Department of the Interior). 2004. Departmental Manual Part 620 Wild Fire Management, Chapter 3 Burned Area Emergency Stabilization and Rehabilitation. U.S. Department of the Interior, Bureau of Land Management.
- DOI. 2010. DOI Order 3294, Energy Management Reform. January.
- DOI, USDA (U.S. Department of Agriculture), and DOE (U.S. Department of Energy). 2003. Scientific Inventory of Onshore Federal Lands Oil and Gas Reserves and the Extent and Nature of Restrictions or Impediments to their Development.
- Doherty, K.E. 2008. Sage-grouse and Energy Development: Integrating Science with Conservation Planning to Reduce Impacts.
- Doherty, K.E., D.E. Naugle, J.D. Tack, B.L. Walder, J.M. Graham, and J.L. Beck. 2014. Linking Conservation Actions to Demography: Grass Height Explains Variation in Greater Sage-grouse Nest Survival. Wildlife Biology 20(6):320–325.
- Eiswerth, M.E. and J.S. Shonkwiler. 2006. Examining Post-Wildfire Reseeding on Arid Rangeland: A Multivariate Tobit Modeling Approach. Ecological Modeling 192:286-298.

- Greater Yellowstone Bald Eagle Working Group. 1996. Greater Yellowstone Bald Eagle Management Plan, 1995 Update. Wyoming Game and Fish Department, Lander, Wyoming.
- Hagen, C.A., J.W. Connelly, and M.A. Schroeder. 2007. A Meta-Analysis for Greater Sage-Grouse Nesting and Brood Rearing Habitats. *Wildlife Biology* 13 (Supplement 1):42-50.
- Herman-Brunson, K.M., K.C. Jensen, N.W. Kaczor, C.C. Swanson, M.A. Rumble, and R.W. Klaver. 2009. Nesting Ecology of Greater Sage-Grouse *Centrocercus urophasianus* at the Easter Edge of their Historic Distribution. *Wildlife Biology* 15:237-246.
- Holloran, M.J., and S.H. Anderson. 2005. Spatial Distribution of Greater Sage-Grouse Nests in Relatively Contiguous Sagebrush Habitats. *The Condor* 107 (4):742-752.
- NRCS (Natural Resources Conservation Service). 2010. National Soil Survey Handbook 430-VI. U.S. Department of Agriculture, Natural Resources Conservation Service. Lincoln, Nebraska. Available online: <http://soils.usda.gov/technical/handbook/>.
- NWSGLWG (Northeast Wyoming Greater Sage-Grouse Local Working Group). 2006. Northeast Wyoming Greater Sage-Grouse Conservation Plan. BLM Buffalo Office, Wyoming Game and Fish Department, Natural Resources Conservation Service, and Other Private Sector Stakeholders. August 15.
- Prichard, D., J. Anderson, C. Correll, J. Fogg, K. Gebhardt, R. Krapf, S. Leonard, B. Mitchell, and J. Staats. 1998. Technical Reference 1737-15, Riparian Area Management: A User Guide to Assessing Proper Functioning Condition and Supporting Science for Lotic Areas. United States Department of the Interior, Bureau of Land Management, United States Department of Agriculture, Forest Service, and Natural Resources Conservation Service.
- Stilwell, D.P., A.M. Elser, and F.J. Crockett. 2012. Reasonable Foreseeable Development Scenario for Oil and Gas Buffalo Field Office Planning Area, Wyoming. U.S. Department of the Interior, Bureau of Land Management.
- Stiver, S.J., A.D. Apa, J.R. Bohne, S.D. Bunnell, P.A. Deibert, S.C. Gardner, M.A. Hilliard, C.W. McCarthy, and M.A. Schroeder. 2006. Greater Sage-Grouse Comprehensive Conservation Strategy. National Sage-Grouse Conservation Planning Framework Team.
- Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. 2015. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference 6710-1. U.S. Department of the Interior, Bureau of Land Management, Denver, Colorado.
- USFWS (U.S. Fish and Wildlife Service). 2013. Greater Sage-grouse (*Centrocercus urophasianus*) Conservation Objectives: Final Report. U.S. Fish and Wildlife Service, Denver, Colorado. February.
- USFWS. 2014. Greater Sage-Grouse: Additional Recommendations to Refine Land Use Allocations in Highly Important Landscapes. Memorandum FWS/AES/058711 to Director, Bureau of Land Management and Director, U.S. Forest Service. October 27.

- USGS (U.S. Geological Survey). 2014. Conservation Buffer Distance Estimates for Greater Sage-Grouse – A Review. Available online: <http://pubs.usgs.gov/of/2014/1239/pdf/ofr2014-1239.pdf>.
- WGFD (Wyoming Game and Fish Department). 2001. Wyoming Game and Fish Department Strategic Habitat Plan. Wyoming Game and Fish Department. Cheyenne, Wyoming.
- WGFD. 2010. State Wildlife Action Plan. Wyoming Game and Fish Department. 909 pages. Cheyenne, Wyoming.
- WGFD. 2011. Wyoming Game and Fish Department Protocols for Treating Sagebrush to be Consistent with WY EO 2011-5, Greater Sage-Grouse Core Area Protection.
- Whicker, A. and J.K. Detling. 1988. Ecological Consequences of Prairie Dog Disturbances. *Bioscience* 38 (11):778-785.
- WSGWG (Wyoming Sage-Grouse Working Group). 2003. Wyoming Greater Sage-grouse Conservation Plan. Cheyenne, Wyoming.
- Wyoming Interagency Vegetation Committee. 2002. Wyoming Guidelines for Managing Sagebrush Communities with Emphasis on Fire Management. Wyoming Game and Fish Department and Wyoming Bureau of Land Management. Cheyenne, Wyoming.
- Wyoming Office of the Governor. 2011. Executive Order 2011-5, Greater Sage-Grouse Core Area Protection.
- Wyoming Office of the Governor. 2015. Executive Order 2015-4, Greater Sage-Grouse Core Area Protection.

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